IV. DATA

CONTENTS

1. Test Mode

1. Operational Procedures IV-1
2. Test Items and Operations IV-3
   1) Sensor/Sw Test IV-3
   2) Motor/Solenoid Test IV-4
   3) Operation Test IV-5
   4) Others (Auxiliary Modes) IV-7

2. ADF 5800 Test Mode

1. Operation Procedures IV-8
2. Test Mode Selection IV-9

3. Advice Displays & the Conditions for Display

1. "CALL SERVICE" indication IV-10
2. "JAM or ERROR" indication IV-13
3. "CHECK SETTING" indication IV-17
4. Others IV-18

4. Description of PCBs

1. Image Processing PCBs (58) IV-19
2. ADF PCB IV-23
3. System Main PCB IV-24
4. System Drive PCB IV-28
5. Pressure Control PCB IV-31
6. Panel Main PCB IV-32
7. Power Supply PCB IV-35

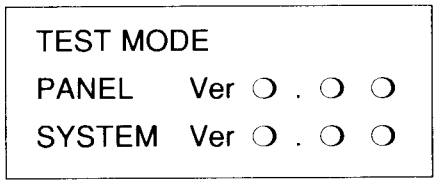
1. Test Mode

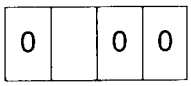
1. Operational Procedures

The Test mode program in the machine is to enable a service technician to check the operation of each electrical component.

1. **[Starting Up Test Mode]**
   Turn on the power pressing down the **"P/M"** and **"ORIGINAL"** buttons on the main panel. In the Test activities the following indication will be displayed in the LCD panel and print quantity displays.

   -This is the initial condition of Test Mode.-





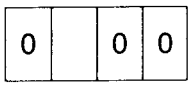
2. **[Checking the Operation of A Component]**
   To check the operation of a component, select a test No. using panel keys and then press the **"START"** button to start the test.

   The figures in the print quantity display mean:
   - The right-side two digits: The test No. selected
   - The left-side on digit: **0** for the "Test OFF" status
     1 for the "Test ON" status

   If the test is an one-cycle operation test, it will be automatically stopped after one check. To stop the test, press the **"START"** button again.

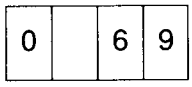
[Example]- In selecting Test mode No. 69

[Print quantity display]



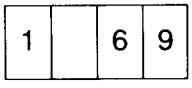
⇓

Select test No. **69** using panel keys.



⇓

Press the **"START"** button.



⇓

Press the **"START"** button again.

0		6	9

3. [Selecting another Test mode and Exitting the Test mode]

To select another Test mode, clear the set Test No. by pressing the **"C"** or **"STOP"** button and select another Test No..

-To exit the Test mode, turn off the power or perform the following operations:

1) Press the **"START"** button to stop the test if in operation.
2) Press the **"C"**or **"STOP"** button to return to the initial condition.
3) Press the **"RESET"** button.

1) Press the **"START"** button.

0		6	9

⇓

2) Press the **"C"** or **"STOP"** button.

0		0	0

3) Press the **"RESET"** button.

TEST MODE
PANEL Ver ❍ . ❍ ❍
SYSTEM Ver ❍ . ❍ ❍

0		0	0

READY
RISOGRAPH
R ⇒ C

2. Test Items and Operations

1) Sensor/Sw Test

A beep sounds in two ways to tell the current condition.

Detection: 0.1 seconds interval beep
No detection: 0.5 seconds interval beep

★ Shaded numbers are special for RC5800.

No.	Test Component	Detection Status	No.	Test Component	Detection Status
01	Paper detection sensor	Light path is blocked.	18	Drum set switch	The actuator is depressed.
02	Elevator upper limit sensor	The actuator is raised to open the light path.	19	Paper receiving sensor 1	Light path is blocked.
03	Elevator lower limit switch	The actuator is depressed.	20	Paper receiving sensor 2	Light path is blocked.
05	Master loading button	The button is pressed.	21	Front cover set sensor	Metal plate is attached.
06	Paper sensor	Ligfht path is blocked.	22	Vertical centering sensor	Light path is NOT blocked.
07	Pressure detection sensor	Light path is blocked.	23	Master end sensor	No reflected light
08	Magnet A detection sensor	Magnetism is detected.	25	Master detection sensor	Reflected light is detected.
09	0° Angular sensor	Magnetism is detected.	26	Original feed-table set switch	The actuator is depressed.
10	180° Angular sensor	Magnetism is detected.	29	Master loading unit switch	The actuator is depressed.
11	Magnet C detection sensor	Magnetism is detected.	31	Master removal sensor	Light path is blocked.
12	Feed-tray down button	The button is pressed.	33	Disposal box set switch	The actuator is depressed.
13	Clamp safety switch	The actuator is pressed.	34	Scanner home sensor	Light path is blocked.
14	Master sensor	Reflected light is detected.	35	Scanner limit sensor	Light path is blocked.
15	Master positioning sensor	Reflected light is detected.	36	Original detection sensor	Reflected light is detected.
16	Drum home position button	The button is pressed.	37	Ink sensor	Ink is detected.
17	Ink bottle switch	The actuator is depressed.	38	Overflow sensor	Ink is detected.

2) Motor/Solenoid Test

To start a test, select a **Test No.** and press the **"START"** button.

To stop the test, press the **"START"** button again.

★ Shaded numbers are special for RC5800.

No.	Test Item	No.	Test Item
40	15 rpm Drum rotation	56	Original stopper solenoid
41	30 rpm Drum rotation	57	Read pulse motor CCW (For Scanner limit sensor)
42	Variable speed Drum rotation	58	Read pulse motor CW (For Scanner home sensor)
47	Paper feed clutch	59	LED arrays in Image scanner ON
48	Pressure solenoid	60	Write pulse motor CCW (Backward)
49	Suction motor (fan)	61	Write pulse motor CW (Feed)
50	Inking motor	62	Thermal pressure motor Up and Down
51	Master removal solenoid and Vertical transport motor	63	Loading pulse motor
53	Clamp solenoid	64	Loading fan
54	Clamp motor CCW (0°)	66	Thermal power supply CTL ON and Storage fan
55	Clamp motor CW (180°)	67	Lock solenoid
		69	Separation fan

[Note]

1) The Inking motor (No. 50) operates only when the ink sensor is out of touch with ink.
2) The Feed-tray interlock Sw operates even in the Test mode.
3) The Paper feed clutch (No. 47) operates only when the light path of the Paper feed clutch sensor is open.

3) Operation Test

To start an operation test, select a **Test No.** and then press the **"START"** button.
To stop the operation test, press the **"START"** button again.

★ Shaded numbers are special for RC5800.

No.	Test Item
70	**Elevator motor Up/Down operation** The following operations will be repeated while pressing down the Feed-tray down button. • When Elevator lower limit switch is ON: Go UP ➪ Elevator upper limit sensor detection ➪ Stop • When Elevator lower limit switch is OFF: Go DOWN ➪ Elevator lower limit switch detection ➪ Stop
71	**Print positioning motor CW/CCW rotation (one-cycle check)** Return to vertical center position ➪ One second half ➪ CW(+) direction rotation ➪ One second halt ➪ CCW (–) direction rotation ➪ One second halt ➪ Return to vertical center position ➪ Stop
72	**Clamp plate Open/Close operation** Rotate Drum to Home postion ➪ Open Clamp plate (180°) ➪ Close Clamp plate (0°) ➪ Rotate Drum to Home position (Then go back to the first step.)
73	**Image scanner shifting (Read pulse motor) operation** Read pulse motor CCW direction rotation ➪ Scanner limit sensor detection ➪ One second halt ➪ Read pulse motor CW direction rotation ➪ Scanner home sensor detection ➪ One second halt ➪ Read pulse motor CCW direction rotation ➪ (Go back to the first step.)
75	**Confidential operation (Repeated by three cycles)** Confidential operation ➪ Pressure solenoid ON ➪ Three times Drum rotation ➪ Confidential operation ➪ (This cycle will be repeated) ➪ Three times Drum rotation ➪ Stop

3) Operation Test

★ Shaded numbers are special for RC5800.

No.	Test Items
77	**Paper feed & Printing operation** The Paper feed tray raises and the paper is continuously fed until paper supply runs out. **Note:** • The copy counter doesn't operate and paper jam is not detected. • Paper feed tray will be automatically lowered without paper. • Ink can be supplied by Inking motor.
78	**Shading compensation operation** Image scanner LED arrays ON ➪ One second ➪ Shading compensation 200 ms
79	**Machine aging operation** 130 rpm Drum rotation ➪ 5000 items Magnet A detection ➪ Stop
80	**Thermal print head check operation 0** Making Master of test pattern #0 memorized in the Image Processing PCB.
81	**Thermal print head check operation 1** Making Master of test pattern #1 memorized in the Image processing PCB.
82	**Thermal print head check operation 2** Making Master of test pattern #2 memorized in the Image Processing PCB.
83	**Thermal print head check operation 3** Making Master of test pattern #3 memorized in the Image processing PCB.
84	**Cutter motor ON [One-cut operation]**
86	**ADF operation** Original feed in ➪ One second halt ➪ Original feed out ➪ One second halt ➪ (Go back to the first step.) **Note:** • ADF operation will be automatically finished without any originals in ADF tray or when original feed jam happens in ADF unit. • ADF operation can be restarted after opening and closing ADF unit when original feed jam happens in ADF unit.

4) Others (Auxiliary Modes)

★ Shaded numbers are special for RC5800.

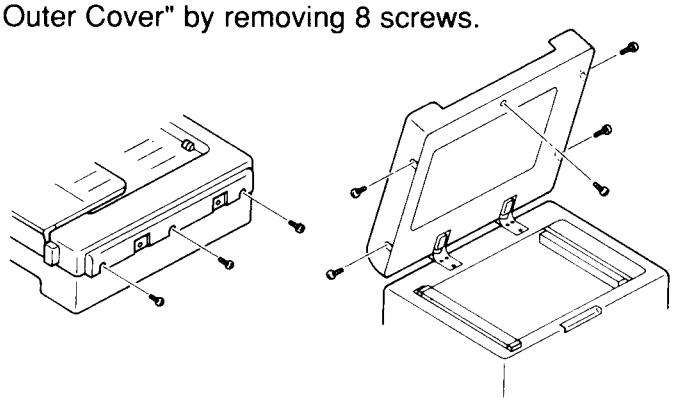
No.	Contents
87	**Image processing PCB adjustment mode** Shifts the Image scanner to the Scanner limit sensor (CCW) by 20mm after master making operation. • In normal operation, the Master count and Copy count signals will not be output, and the Key/card counter set signal will not be checked. * The machine will be released from this condition when the power is turned off or the Reset button is pressed for the initial set-up.
88	**Release of Test mode No.89 (Clearing of "Remove Stopper screw." message)** Clears the panel message, "Remove Stopper Screw", in an unpacking operation.
89	**Shift of the Image scanner for Transportation** Shifts the Image scanner to the transportation fixing position to protect the Image scanner during transportation.
90	**Clearing of Memory** All RAM contents on the System Main and Panel Main PCBs will be initialized. (The same operation as when the Memory back-up battery is removed off.)
91	**Input of Telephone No.** The telephone No., which will be displayed in the LCD panel in case of the trouble messages (**T#: CALL SERVICE**), can be input. **[Procedures for Inputting Tel. No.]** 1. Press the "C" button. 2. Input Tel. No. using panel keys. 3. Terminate the Test mode. * **If the Test mode No.90 is selected, the telephone No. will be cleared.**
92	**Prevention of the Master count, Copy count, and Key/card counter set signals output** • In normal operation, the Master count and Copy count signals will not be output, allowing a service technician to print without increasing the digit of the Master and Copy counters. • The Key/card counter set signal will not be checked, allowing a service technician to print without inserting a counter card into the Key/card counter. • The machine will be released from this condition when the power is turned off or the Reset button is pressed for the initial set-up.

2. ADF 5800 Test Mode

1. Operation Procedures

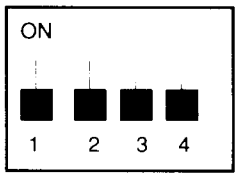
ADF 5800 has its own test mode, enabling service technicians to check the ADF operation independently of the machine.

(1) Remove "ADF Outer Cover" by removing 8 screws.



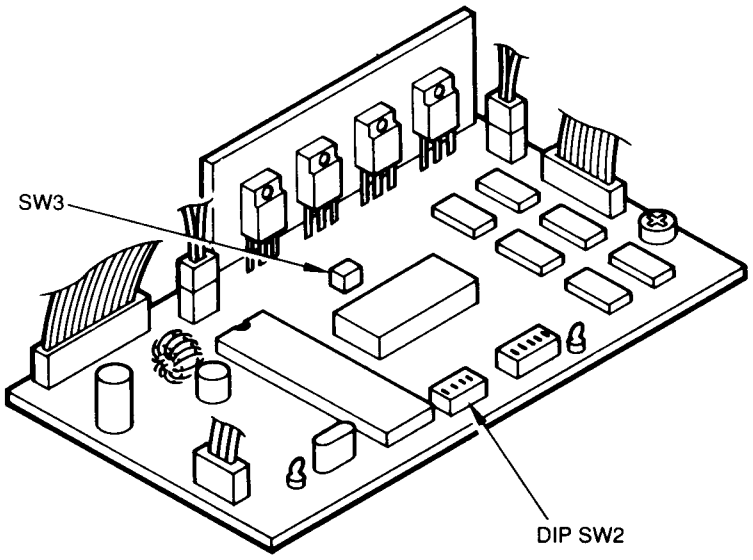
(2) Turn on Switch #1 of DIP SW2 on the ADF PCB and turn on the power.

SW2



#1 : For Test mode set-up
(Should be set before turning on the power.)
OFF - Normal operation
ON - Test mode
#2 : Test mode selection (Refer to the chart.)
#3 : Test mode selection (Refer to the chart.)
#4 : Original paper size selection
(Should be set before turning on the power.)
OFF - A/B sizes paper
ON - Letter/Legal paper

(3) To start up each Test mode, press SW3 on the ADF PCB.



2. Test Mode Selection

# 2	# 3	Test Item
OFF	OFF	**ADF Transfer Motor Operation Check** Each time pressing SW3 on the ADF PCB, the ADF transfer motor rotates in the following order. Forward (CW) ➪ Backward-High (CCW) ➪ Backward-Low (CCW) ➪ Backward-Medium (CCW)
OFF	ON	**Single Original Feeding Mode** Each time pressing SW3 on the ADF PCB, an original is fed into and ejected out of the ADF.
ON	OFF	**Multi Original Feeding Mode** When pressing SW3 on the ADF PCB, originals on the ADF tray keep being fed into and ejected out of the ADF until no original remains on the tray.
ON	ON	**Free Run Operation** When pressing SW3 on the ADF PCB, the feeding-in and ejecting-out operation is performed without originals. **NOTE:** Never feed originals in this mode.

NOTE:
1. If an other Test mode is desired after one Test mode is performed, open up the ADF or turn off the power before changing DIP switches' setting.
2. In "Single original feeding mode" and "Multi original feeding mode", the Original stopper in the machine should be manually lowered because the Original stopper solenoid doesn't operate in the ADF Test mode.

2. Advice Displays & the Conditions for Display

1. "CALL SERVICE" indication

T1
CALL SERVICE

- Main Motor Lock -

Displayed to interrupt the machine operation:

1) If the Magnet A is still detected by the **Magnet A detection sensor 2 seconds** after the Main motor started.
2) If the Magnet A hasn't been detected by the **Magnet A detection sensor within 5 seconds** after the Main motor started.

T2
CALL SERVOCE

- Elevator Motor Lock -

Displayed to interrupt the machine operation:

1) If the actuator of the **Elevator upper limit sensor** has not been raised to open the light path **within 7 seconds** after the Elevator motor started to rise.
2) If the actuator of the **Elevator lower limit switch** has not been depressed **within 7 seconds** after the Elevator motor started to lower.
3) If the actuator of the **Elevator lower limit sensor** is still depressed **2 seconds** after the Elevator motor started to rise.
4) If the actuator of the **Elevator upper limit sensor** is still raised to open the light path **2 seconds** after the Elevator motor started to lower.

T3
CALL SERVICE

- Clamp Error -

Displayed to interrupt the machine operation:

1) If the actuator of the **Clamp safety switch** is still depressed **4 seconds** after the Clamp solenoid was activated (turned on).
2) If the actuator of the **Clamp safety switch** has not been depressed **within 4 seconds** after the Clamp solenoid was released (turned off).
3) If the Angular magnet has not been detected by the **Angular sensor** (either 0° or 180°) **within 8 seconds** after the Clamp motor started rotating.

Displayed to prevent the machine operation:

4) If the actuator of the **Clamp safety switch** is not depressed when the Clamp solenoid is not in operation.

T4
CALL SERIVCE

- Ink Overflow -

Displayed after the machine operation finished, immediately stopping the Inking motor.

1) If the **Overflow sensor** detects excessive ink in the Squeegee unit.

T5
CALL SERVICE

- Print Positioning Motor Lock -

Displayed after the machine operation finished, immediately stopping the Print positioning motor:

1) If the **Vertical centering sensor** status has not been changed from ON to OFF (or OFF to ON) **within 12 seconds** after the Print positioning motor started rotating.

T6
CALL SERVICE

- Communication Error between Panel and System PCBs -

Displayed to interrupt the machine operation:

1) If a communication error has occurred between the Panel and System PCBs.

T7
CALL SERVICE

- Communication Error between Panel and Digitizer PCBs -

Displayed to interrupt the machine operation:

1) If a communication error has occurred between the Panel and Digitizer PCBs.

T8
CALL SERVICE

- Communication Error between System PCBs and Interface Accessaries -

Displayed to interrupt the machine operation:

1) If a communication error has occurred between the System PCBs and the interface accessaries.

T9
CALL SERVICE

- Communication Error between System PCBs and RC Sorter -

Displayed to interrupt the machine operation:

1) If a communication error has occurred between the System PCBs and the RC sorter.

T10
CALL SERVICE

- Malfunction of the Magnet A Detection Sensor -

Displayed to interrupt the machine operation:

1) If the **Magnet A detection sensor** has not detected the Magnet A by the time the Pressure detection sensor status has changed twice from OFF to ON (the light path of the sensor has been blocked twice by the Pressure Disc) after the Main motor started.

T11
CALL SERVICE

- Pressure Control Motor Lock -

Displayed to interrupt the machine operation:

1) If the resistance value of the **Print pressure detection potentiometer** has not changed to a specified value within **20 seconds** after the Pressure control motor started.

T13
CALL SERVICE

- Cutter Motor Lock -

Displayed:

1) If the error message **"MASTER CUT MALFUNCTION/PRESS RESET BUTTON'** has been displayed twice in master making operation.

T14
CALL SERVICE

- ADF Transfer Motor Lock -

Displayed to interrupt the ADF operation:

1) If no pulse signal is sent from the **ADF clock sensor 1 more than 500 ms** after the ADF transfer motor is in operation.

T15
CALL SERVICE

- Read Pulse Motor Lock -

Displayed to interrupt the machine operation:

1) If the light path of the **Scanner home sensor** is not blocked **within 14330 pulses** after the Read pulse motor started in the Image scanner home positioning (initializing) operation.
2) If the light path of the **Scanner home sensor** is not opened **within 315 pulses** after the Read pulse motor started in the pre-scanning operation.
3) If the Image scanner has not been returned to the home position (the **Scanner home sensor**) **14330 pulses** after the Read pulse motor started in the image scanning operation.

T16
CALL SERVICE

- Malfunction of the Trimming PCB -

Displayed to interrupt the machine operation:

1) If the data signals such as original size, are not output from the **Trimming PCB** at the start of the image scanning operation.

2. "JAM or ERROR" indication

PAPER JAM
CHECK PAPER FEED AREA

- Paper Jam in the Paper Feed Area -

[In Master-making]

Displayed after the master has been loaded on the Drum:

1) If the light path of the **Paper sensor** is blocked at the second Magnet A detection after cutting operation.

Note:

- If the light path of the **Paper receiving sensor 1** was open at the first Magnet A detection after cutting, it is judged that the first sheet is stuck in the second paper feed area.
- If the light path of the **Paper receiving sensor 1** was blocked at the first Magnet A detection after cutting, it is judged that some sheets have been fed with lead and trail edges stuck to each other.

[In Printing]

Displayed in the following cases:

1) If the light path of the **Paper receiving sensor 1** is open at the first Magnet A detection after the light path blocking of the Paper sensor, and if the light path of the **Paper sensor** is still blocked at the second Magnet A detection.

Note:

- At the first Magnet A detection, the Print signal is interrupted to stop the first paper feed (Paper feed clutch's operation).
- Judged that paper is stuck in the second paper feed area.

2) If the light path of the **Pressure detection sensor** has been blocked twice while that of **Paper sensor** is kept blocked from the first blocking after the start of printing.
The jam message will be displayed when the Drum stops after the Magnet A has been detected twice by the detection sensor following the above.

Note:

- At the light path blocking of the Pressure detection sensor, the Print signal is interrupted to stop the first paper feed (Paper feed clutch's operation).
- Judged that some sheets have been fed with lead and trail edges stuck to each other.

3) If the light paths of the **Paper receiving sensor 1** and **Paper sensor** are both open at a Magnet A detection, and if the light path of the **Paper sensor** has been open during the following 2 Magnet A detections.
The jam message will be displayed when the Drum stops after the Magnet A has been detected twice by the detection sensor following the above.

Note:

- At the first Magnet A detection following the above (at the fourth one counted from the beginning), the Print signal is interrupted to stop the first paper feed (Paper feed clutch's operation).
- Judged that paper has misfed or slipped in feeding.

PAPER JAM UNDER DRUM
PULL OUT DRUM

- Paper Jam under the Drum or in the Paper Receiving Area -

[In Master-making]

Displayed after the master has been loaded on the Drum:

1) If the light path of the **Paper receiving sensor 1** is blocked at the start of the light path blocking of the **Pressure detection sensor.**

   Note:

   - Judged that the previous jammed paper still remains under the Drum.

2) If the light path of the **Paper receiving sensor 1** was open at the first Magnet A detection after cutting, and if the light path of the **Paper sensor** is also open at the second Magnet A detection.

   Note:

   - Judged that the first copy was not separated from the Drum and has stuck onto it.

[In Printing]

Displayed in the following cases:

1) If the light path of the **Paper receiving sensor 1** is blocked at the start of the light path blocking of the **Pressure detection sensor.**

   The jam message will be displayed when the Drum stops after the Magnet A has been detected twice by the detection sensor following the above.

   Note:

   - At the start of the light path blocking of the Pressure detection sensor, the Print signal is immediately interrupted to stop the first paper feed (Paper feed clutch's operation). Judged that the printed copy has jammed around the Separator.

2) If the light path of the **Paper receiving sensor 1** is open at the first Magnet A detection after the light path blocking of the **Paper sensor**, and if the light path of the **Paper sensor** is open at the second Magnet A detection.

   Note:

   - At the first Magnet A detection, the Print signal is interrupted to stop the first paper feed (Paper feed clutch's operation). Judged that the printed copy was not separated from the Drum and has stuck onto it.

3) If the light path of the **Paper receiving sensor 2** has been kept blocked while that of the **Paper receiving sensor 1** has been blocked twice.

   The jam message will be displayed when the Drum stops after the Magnet A has been detected three times by the detection sensor following the above.

   Note:

   - At the first Magnet A detection following the above, the Print signal is interrupted to stop the first paper feed (Paper feed clutch's operation).
   - Judged that the printed copy has jammed around the exit of the paper receiving side or on the Paper receiving tray.

MASTER CLAMP ERROR
PRESS RESET BUTTON

- The Master has Not been Loaded onto the Drum -

Displayed in master-making and confidential processes after the following display message is cleared:

[REMOVE CUT MASTER STRIP]

Note: The above message will be displayed:

1) If the **Master sensor** did not detect the master on the Drum at the Magent C-1 detection in master loading process (preventing the first paper feed-Paper feed clutch's operation), and then if the **Master positioning sensor** detects the master at the Magnet A detection after master-cutting operation at the Magnet C-2 detection.
   If the **Master positioning sensor** does not detect the master at the Magnet A detection after master-cutting operation, the above message **[REMOVE CUT MASTER STRIP]** will not be displayed.

MASTER CUT
MALFUNCTION
PRESS RESET BUTTON

- Master Cut Error -

Displayed to interrupt the machine operation in master-making and confidential processes:

1) If the **Master sensor** detected the master on the Drum at the Magnet C-1 detection in master loading process, and then if the **Master positioning sensor** detects the master at the Magnet A detection after master-cutting operation (the Magnet C-2 detection).

MASTER MIS-FEED
RESET MASTER

- Master has Not been Properly Fed or Loaded -

Displayed after the master has been loaded onto the Drum in master making or confidential process:

1) If the **Master positioning sensor** has not detect the master material **within 536 pulses** after the Loading pulse motor started rotating following the master cutting operation.
   Note:
   - The Loading and Write pulse motors are turned off following the above.

Displayed to interrupt the machine operation when the Master loading button was pressed:

2) If the **Master positioning sensor** has not detected the master material **within 2426 pulses** after the Loading pulse motor was turned on.
3) If the **Master positioning sensor** has not detected the master **within 536 pulses** after the Loading pulse motor was turned on following the operation of the Cutter motor.

USED MASTER NOT
DISCHARGED
PULL OUT DRUM
AND CHECK

- The Used Master has Not been Removed from the Drum -

Displayed after the Image scanning and Master making operations are completed or in the confidential operation:

1) If the light path of the **Master removal sensor** has been open until the Magent A detection sensor detects the Magnet A after the detection of the master by the Master sensor at the Magnet C-1 detection, during master removal.
   Note:
   - If the Master sensor does not detect the master at the Magnet C-1 detection, in the above case, the Master removal sensor is prevented from operating and the message will not be displayed.

ORIGINAL MISFEED IN ADF
OPEN STAGE COVER/
REMOVE ORIGINAL

- Original has Misfed or Jammed in the ADF Feed Side -

Displayed to immediately interrupt the machine operation:

1) If the **ADF registration sensor** is blocked when the ADF starts to operate.
2) If the **ADF registration sensor** is not blocked by the original **within 640ms** after the start of the ADF transfer motor (clockwise rotation) in the original feed operation.
3) If the **ADF registration sensor** has not been opened **within 1410ms** after the ADF transfer motor reversed the rotation direction to counter-clockwise in the original feed operation.
4) If the **ADF registration sensor** is blocked by the original when the original feed operation finished.

ORIGINAL JAM IN ADF
OPEN STAGE COVER/
REMOVE ORIGINAL

- Original has Misejected or Jammed in the ADF Ejection Side -

Displayed after the master has been loaded onto the Drum:

1) If the actuator of the **ADF ejection sensor** is held up, when the ADF starts to operate.
2) If the actuator of the **ADF ejection sensor** has not been pushed up, **within 1270ms** after the ADF transfer motor started rotating counter-clockwise in the original ejection operation.
3) If the actuator of the **ADF ejection sensor** is not released **within 1480ms** in the original ejection operation.

ORIGINAL REMAINING
ON THE STAGE

- Original Remains on the Stage Glass in ADF Operation -

Displayed immediately after originals have been placed on the Original tray:

1) If the **Original detection sensor** detects the original placed on the Stage glass when the **ADF original detection sensor** detects the originals placed on the Original tray.

NO MASTER ON DRUM
SET ORIGINAL IN PLACE
AND PRESS START BUTTON

- The Master is Not Attached to the Drum -

Displayed **for 2 seconds** after the Drum has stopped at the Magnet A detection:

1) If the **Master sensor** does not detect the master (the reflected light) when the Magnet C-1 has been detected by the Magnet C detection sensor just after the print started.

Note:

- At the Magnet C-1 detection, the Print signal is interrupted to stop the first paper feed (Paper feed clutch's operation).

MASTER JAM IN
MASTER DISPOSAL UNIT

- The Used Master is Jammed and Blocked at the entrance of Master disposal box -

Displayed when "START" button is pressed for master-making operation.

1) If the light path of the **Master removal sensor** is blocked at the start of master-making operation.

3. "CHECK SETTING" indication

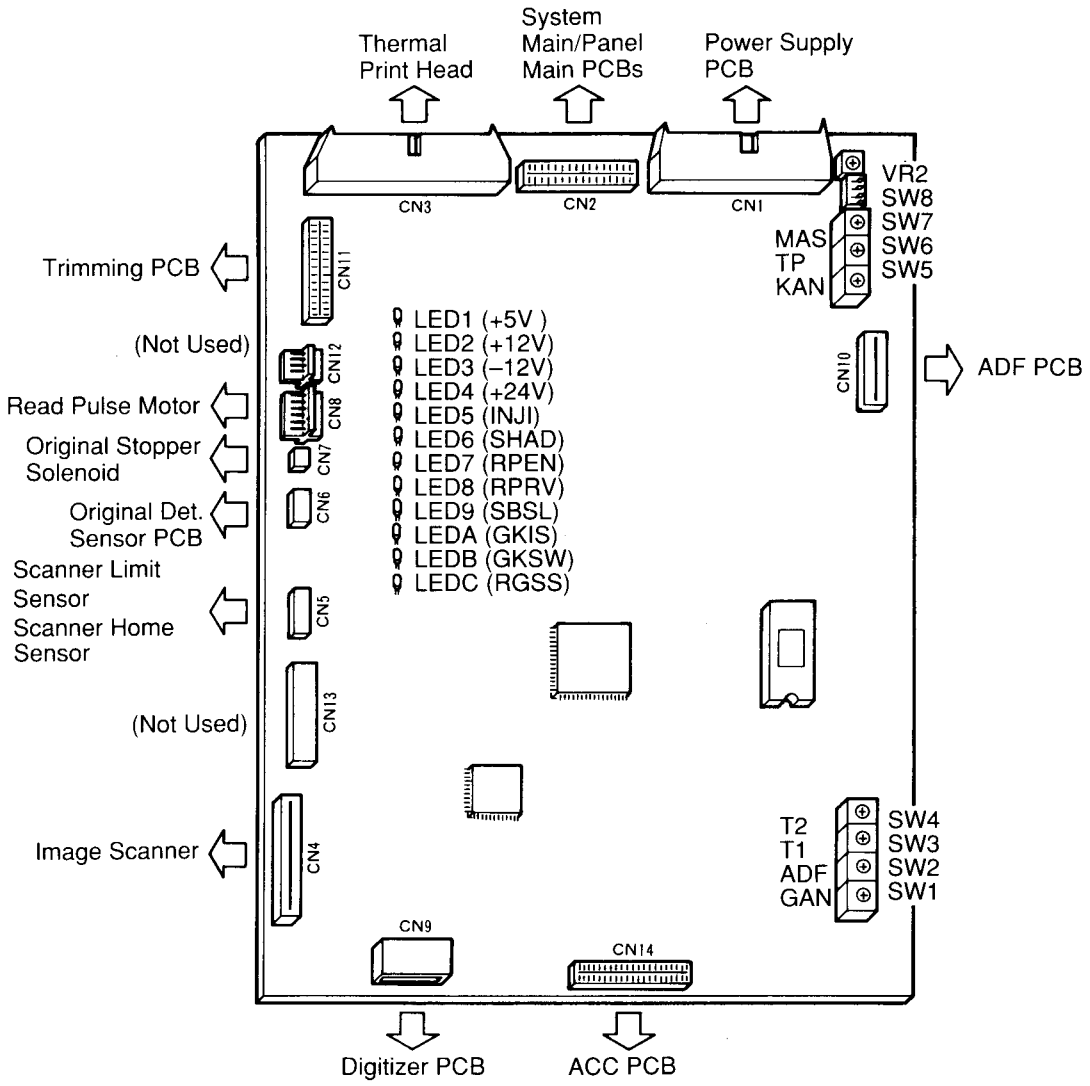
SET DRUM IN PLACE	Displayed to prevent the machine operation: • If the actuator of the **Drum set switch** is not depressed.
SET INK BOTTLE IN PLACE	Displayed to prevent the machine operation: • If the actuator of the **Ink bottle switch** is not depressed.
ADD PAPER	Displayed to interrupt the Print signal (the first paper feed) in printing: 1) If the light path of the **Paper detection sensor** is open when that of the Pressure detection sensor has been opened in printing. Displayed to prevent the machine operation: 2) If the light path of the **Paper detection sensor** is open.
SET LEAD EDGE OF MASTER UNDER GREEN FILM	Displayed to prevent the machine operation: • If the **Master detection sensor** does not detect the master material (the reflected light).
CLOSE FRONT COVER	Displayed to prevent the machine operation: • If the metal plate is not attached to the **Front cover set sensor.**
SET MASTER DISPOSAL BOX IN PLACE	Displayed to prevent the machine operation: • If the actuator of the **Disposal box set switch** is not depressed.
SET ORIGINAL FEED TABLE IN PLACE	Displayed to prevent the machine operation: • If the actuator of the **Original-feed table set switch** is not depressed.
CLOSE MASTER LOADING UNIT	Displayed to prevent the machine operation: • If the actuator of the **Master loading unit switch** is not depressed.
CLOSE STAGE COVER	Displayed to prevent the machine operation: • If the **ADF setting sw** is not ON when the **ADF original detection sensor** detects the originals placed on the Original tray.

4. Others

REPLACE INK BOTTLE	Displayed after the machine operation is finished: • If the **Ink sensor** has not detected ink in the Squeegee unit **within 30 seconds** after the Inking motor was started rotating by the detection of scarce ink in the unit.
REPLACE MASTER ROLL	Displayed after the machine operation is finished: • If the black tape attached at the end of the Master roll has been detected by the **Master end sensor** during master making or the confidential operation.
EMPTY DISPOSAL BOX	Displayed after the machine operation is finished: • If the **Internal counter** for disposed masters on the **Panel PCB** has counted 30 through the detection of disposed masters by the **Master removal sensor.**
REMOVE CUT MASTER STRIP	Displayed: • If the **Master positioning sensor** detects the master meterial (the reflected light) just after the master cut operation is completed.
SELECT PRINT QUANTITY	Displayed: • If the "START" button is pressed for printing when the print quantity is set to **0**.
PRESS RESET BUTTON	Displayed: • When jam has occurred.
TO RESUME PRESS START BUTTON	Displayed: • If the "REST" button has been pressed after the error or jam occurred.

4. Description of PCBs

1. IMAGE PROCESSING PCB (58)



LED **- When LED is ON -**

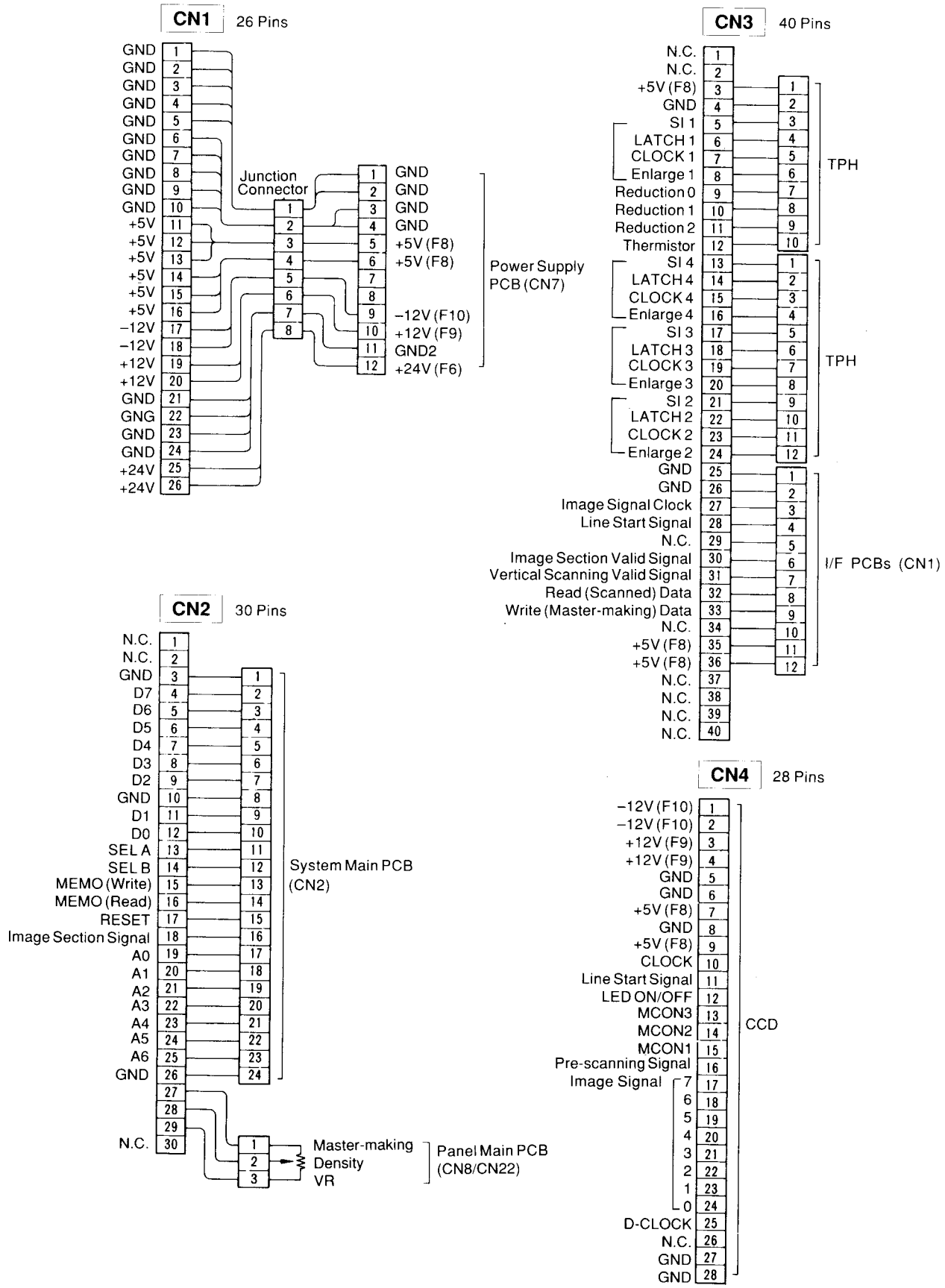
LED1 (+5V)	: +5V is supplied into PCB.
LED2 (+12V)	: +12V is supplied into PCB.
LED3 (–12V)	: –12V is supplied into PCB.
LED4 (+24V)	: +24V is supplied into PCB.
LED5 (INJI)	: "Read/Write Start Signal" is output.
LED6 (SHAD)	: "Shading Compensation Signal" is output.
LED7 (RPEN)	: Read Pulse Motor is ON.
LED8 (RPRV)	: Read Pulse Motor is rotating CCW.
LED9 (SBSL)	: Original Stopper Solenoid is ON.
LEDA (GKIS)	: Original Det. Sensor is detecting reflected light.
LEDB (GKSW)	: Scanner Home Sensor is activated.
LEDC (RGSS)	: Scanner Limit Sensor is activated.

VR

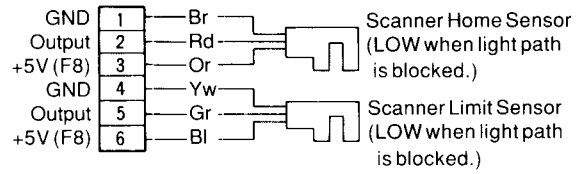
VR2 (NDD)	: For contrast level adjustment in image scanning. (The contrast will be darker by turning it clockwise.)

SW

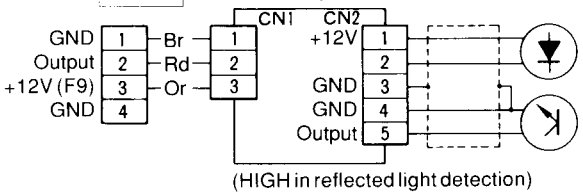
SW1 (GAN)	: For contrast balance (γ compensation) adjustment in image scanning.
SW2 (ADF)	: For adjustment of scanning (read)-start position.
SW3 (T1)	: For adjustment of heating power (HP1) of Thermal Print Head
SW4 (T2)	: For adjustment of heating power (HP2) of Thermal Print Head
SW5 (KAN)	: Not Used
SW6 (TP)	: Not Used
SW7 (MAS)	: For adjustment of "Line-copy mode slice level."
SW8 (Dip SW)	: Used only for adjustment in factory


CN1
26 Pins
GND 1
GND 2
GND 3
GND 4
GND 5
GND 6
GND 7
GND 8
GND 9
GND 10
+5V 11
+5V 12
+5V 13
+5V 14
+5V 15
+5V 16
−12V 17
−12V 18
+12V 19
+12V 20
GND 21
GNG 22
GND 23
GND 24
+24V 25
+24V 26
Junction Connector
1 2 3 4 5 6 7 8
1 GND
2 GND
3 GND
4 GND
5 +5V (F8)
6 +5V (F8)
7
8
9 −12V (F10)
10 +12V (F9)
11 GND2
12 +24V (F6)
Power Supply PCB (CN7)
CN3
40 Pins
N.C. 1
N.C. 2
+5V (F8) 3
GND 4
SI 1 5
LATCH 1 6
CLOCK 1 7
Enlarge 1 8
Reduction 0 9
Reduction 1 10
Reduction 2 11
Thermistor 12
1 2 3 4 5 6 7 8 9 10
TPH
SI 4 13
LATCH 4 14
CLOCK 4 15
Enlarge 4 16
SI 3 17
LATCH 3 18
CLOCK 3 19
Enlarge 3 20
SI 2 21
LATCH 2 22
CLOCK 2 23
Enlarge 2 24
1 2 3 4 5 6 7 8 9 10 11 12
TPH
GND 25
GND 26
Image Signal Clock 27
Line Start Signal 28
N.C. 29
Image Section Valid Signal 30
Vertical Scanning Valid Signal 31
Read (Scanned) Data 32
Write (Master-making) Data 33
N.C. 34
+5V (F8) 35
+5V (F8) 36
N.C. 37
N.C. 38
N.C. 39
N.C. 40
1 2 3 4 5 6 7 8 9 10 11 12
I/F PCBs (CN1)
CN2
30 Pins
N.C. 1
N.C. 2
GND 3
D7 4
D6 5
D5 6
D4 7
D3 8
D2 9
GND 10
D1 11
D0 12
SEL A 13
SEL B 14
MEMO (Write) 15
MEMO (Read) 16
RESET 17
Image Section Signal 18
A0 19
A1 20
A2 21
A3 22
A4 23
A5 24
A6 25
GND 26
27
28
29
N.C. 30
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
System Main PCB (CN2)
1 2 3
Master-making Density VR
Panel Main PCB (CN8/CN22)
CN4
28 Pins
−12V (F10) 1
−12V (F10) 2
+12V (F9) 3
+12V (F9) 4
GND 5
GND 6
+5V (F8) 7
GND 8
+5V (F8) 9
CLOCK 10
Line Start Signal 11
LED ON/OFF 12
MCON3 13
MCON2 14
MCON1 15
Pre-scanning Signal 16
Image Signal 7 17
6 18
5 19
4 20
3 21
2 22
1 23
0 24
D-CLOCK 25
N.C. 26
GND 27
GND 28
CCD

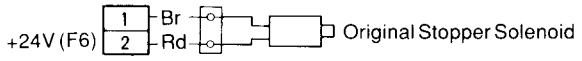
CN5 6 Pins


GND 1 Br
Output 2 Rd
+5V (F8) 3 Or
GND 4 Yw
Output 5 Gr
+5V (F8) 6 Bl
Scanner Home Sensor (LOW when light path is blocked.)
Scanner Limit Sensor (LOW when light path is blocked.)

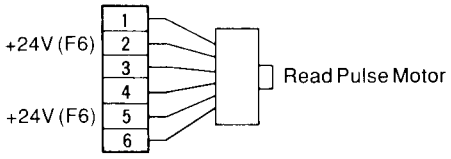
CN6 4 Pins Original Det. Sensor PCB



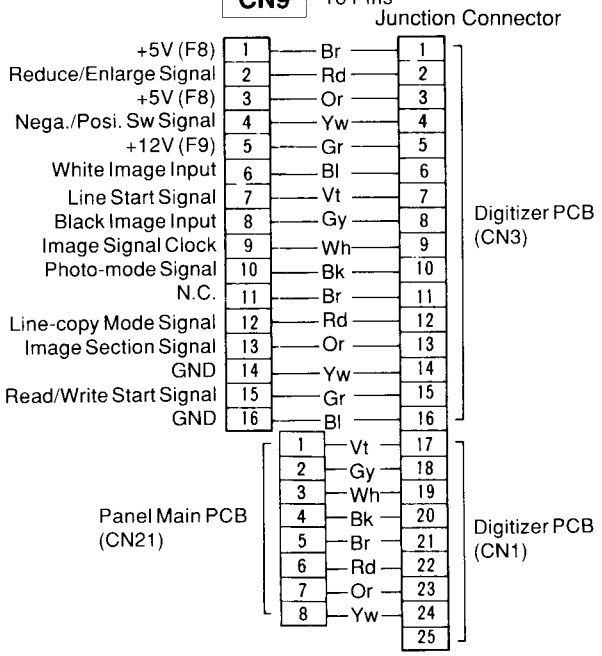
CN7 2 Pins



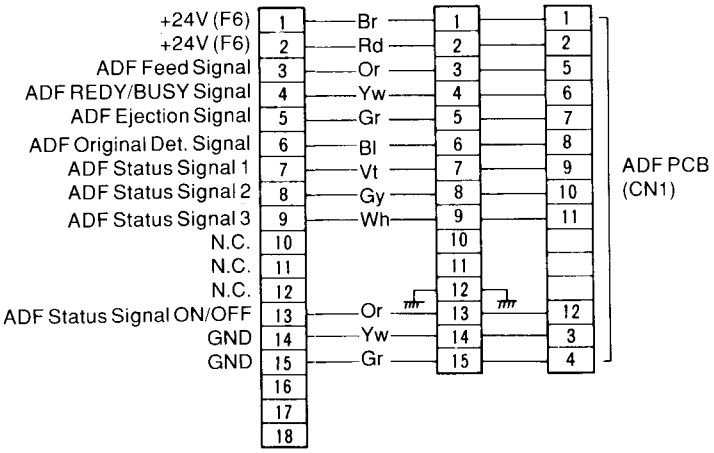
CN8 6 Pins



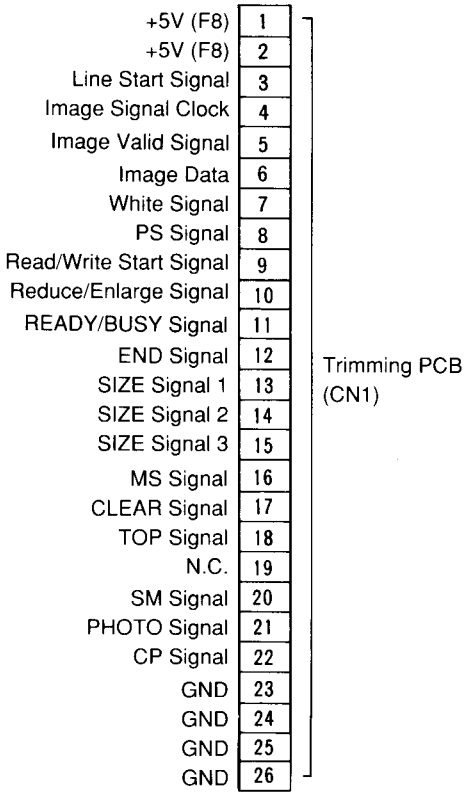
CN9 16 Pins Junction Connector



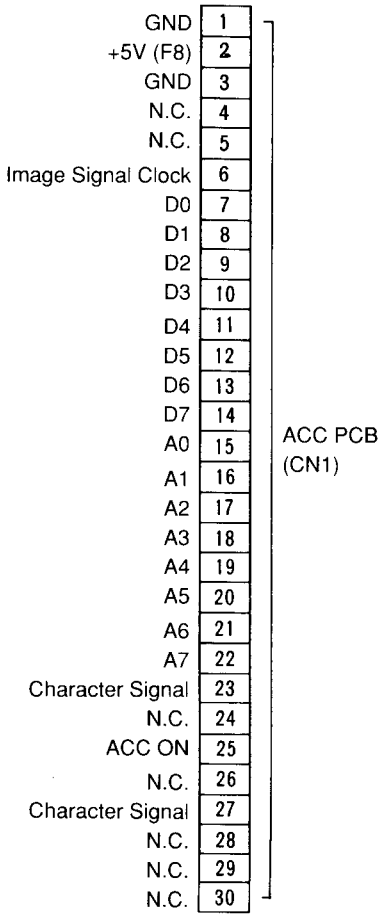
CN10 18 Pins Junction Connector



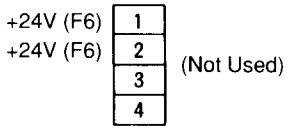
CN11 26 Pins



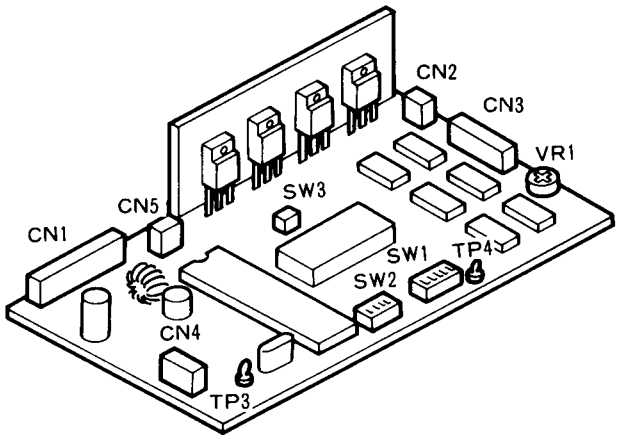
CN14 30 Pins



CN12 4 Pins



2. ADF PCB



VR

VR1 : For sensitivity adjustment of ADF registration sensor

LED **- When LED is ON -**

LED1 : +24V is supplied into PCB

TP

TP1 (+24V) : +24V
TP2 (+5V) : +5V
TP3 (0V) : GND
TP4 (REGS) : OADF registration sensor's Output
TP5 (X4) : Clock Sensor's Output
TP6 (MCK2) : ADF clock Sensor 1's Output
TP7 (MCK1) : ADF clock Sensor 2's Output

SW

SW1 : For stop position adjustment of original feed
SW2 : For ADF Test Mode
SW3 : For ADF Test Mode

CN1 12 Pins Junction Connector

+24V (F6)	1	1	Image Processing PCB (58) (CN10)
+24V (F6)	2	2	
GND	3	14	
GND	4	15	
ADF Feed Signal	5	3	
ADF READY/BUSY	6	4	
ADF Ejection Signal	7	5	
ADF Original Det. Signal	8	6	
ADF Status Signal 1	9	7	
ADF Status Signal 2	10	8	
ADF Status Signal 3	11	9	
ADF Status Signal ON/OFF	12	13	
		10	
		11	
		12	

CN3 7 Pins

+5V	1	ADF registration sensor (Send)
Output	2	ADF registration sensor (Receive) (HIGH when light path is blocked.)
GND	3	
Output	4	ADF original detection Sensor (Low when ON)
Output	5	ADF clock Sensor 1 (HIGH when blocked)
Output	6	ADF clock Sensor 2 (HIGH when blocked)
GND	7	

CN4 3 Pins

+5V	1	ADF ejection sensor (Low when ON)
Output	2	
GND	3	

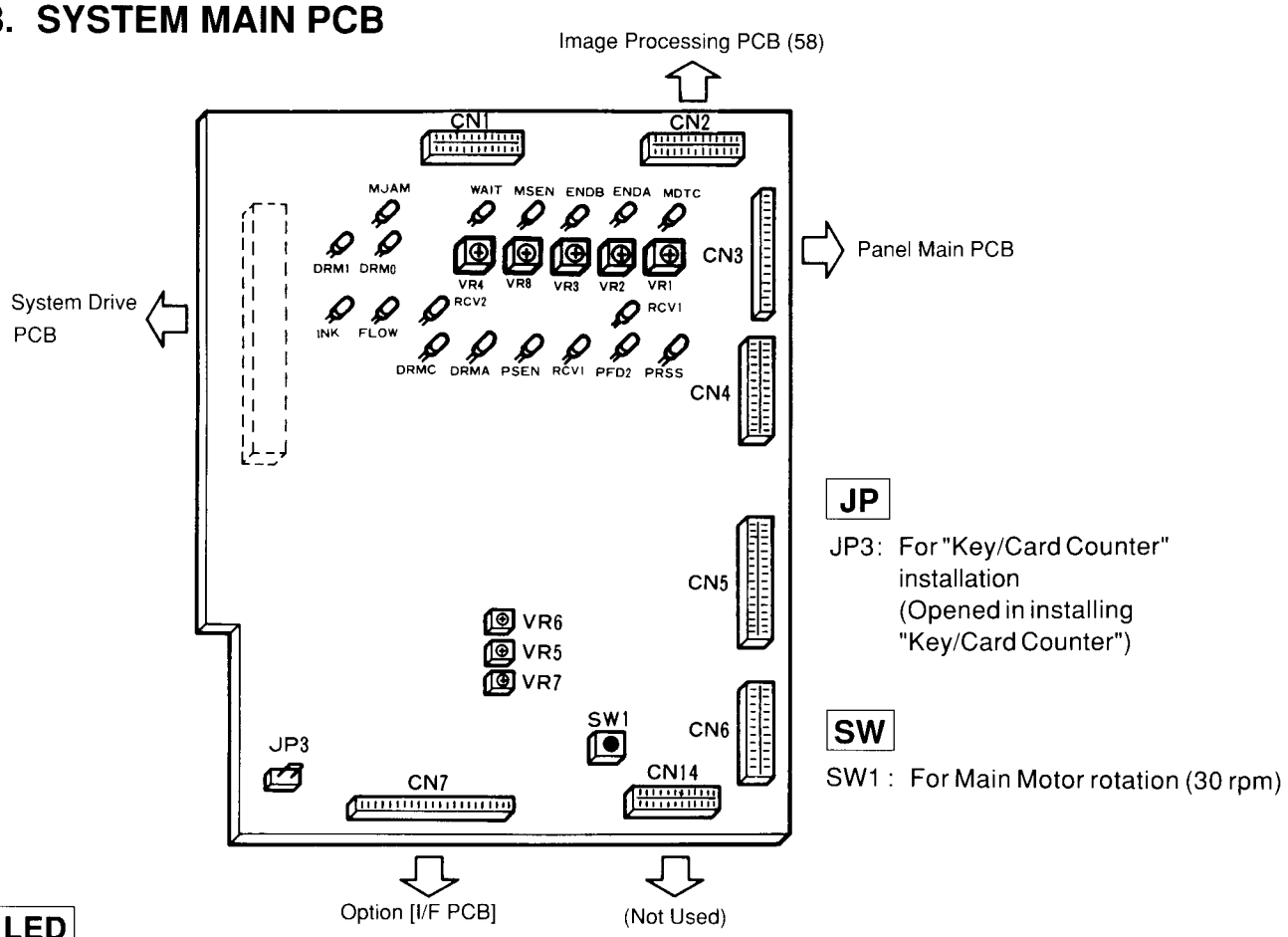
CN2 2 Pins

1	1	ADF transfer motor
2	2	

CN5 2 Pins

+24V (F6)	1	ADF setting SW (N.O.)
	2	

3. SYSTEM MAIN PCB



JP

JP3: For "Key/Card Counter" installation (Opened in installing "Key/Card Counter")

SW

SW1 : For Main Motor rotation (30 rpm)

LED

LED – When LED is ON –

MDTC : Master Det. Sensor is detecting reflected light (Master).
ENDA : Master End Sensor (A4) is NOT detecting reflected light.
ENDB : Master End Sensor (B4) is NOT detecting reflected light.
MSEN : Master Sensor is detecting reflected light (Master).
WAIT : Master Positioning Sensor is detecting reflected light (Master).
MJAM : The light path of Master Removal Sensor is blocked.
DRM0 : 0° Angular Sensor is detecting magnetism (Angular Magnet).
DRM1 : 180° Angular Sensor is detecting magnetism (Angular Magnet).
PFD1 : The actuator of Paper Buckle Det. Sensor is raised to open the light path.
RCV2 : The light path of Paper Receiving Sensor 2 is blocked.
FLOW : Overflow Sensor is detecting ink.
INK : Ink Sensor is NOT detecting ink.
PRSS : The light path of Pressure Detection Sensor is blocked.
PFD2 : The light path of Paper Feed Clutch Sensor is open.
RCV1 : The light path of Paper Receiving Sensor 1 is blocked.
PSEN : The light path of Paper Sensor is blocked.
DRMA : Magnet A Detection Sensor is detecting magnetism (Magnet A).
DRMC : Magnet C Detection Sensor is detecting magnetism (Magnet C-1 or -2).

VR

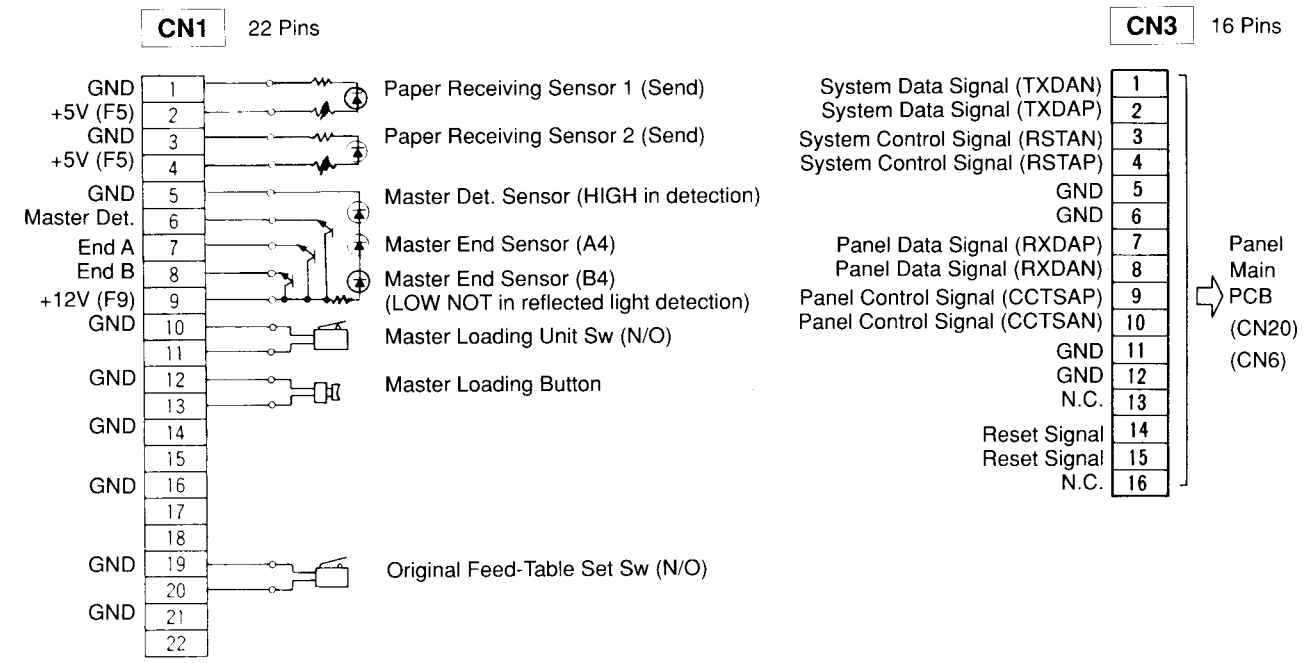
VR

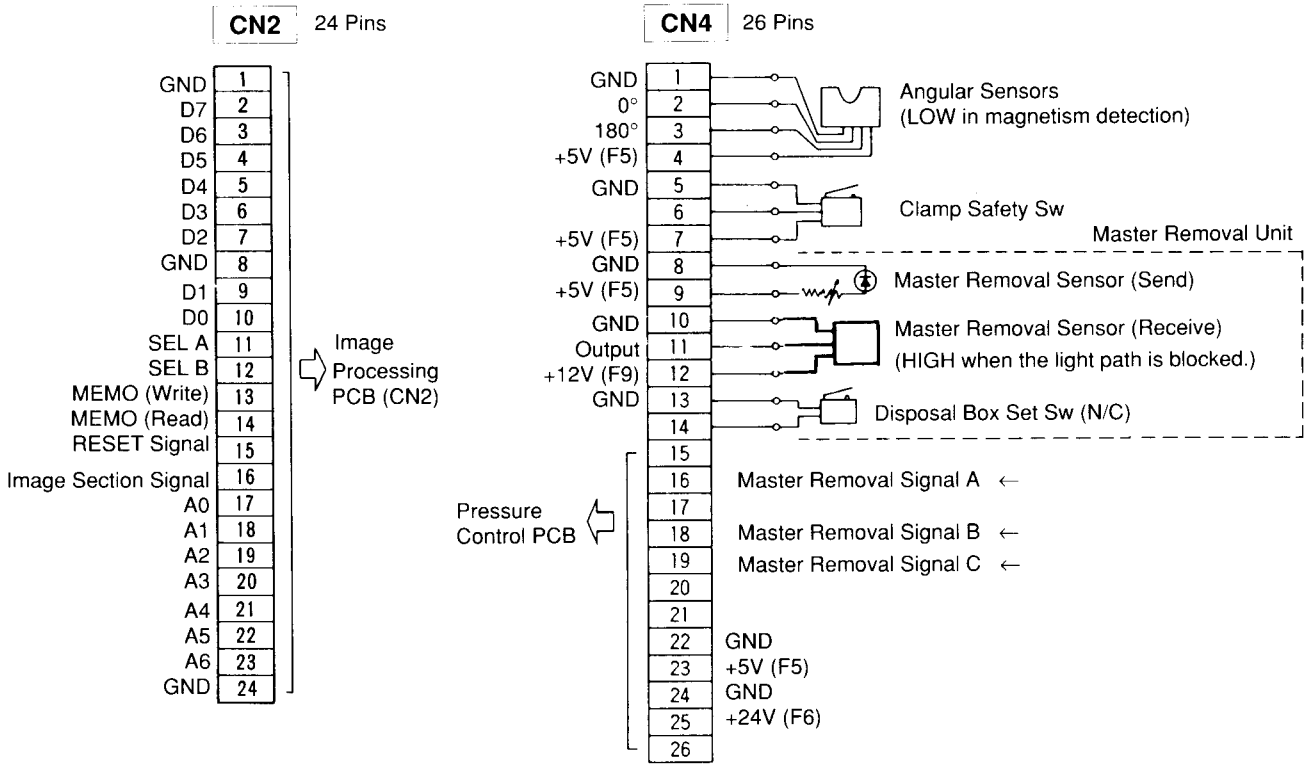
VR1 : For detection sensitivity adjustment of Master Det. Sensor (Sensitivity goes up by clockwise rotation.)
VR2 : For detection sensitivity adjustment of Master End Sensor-A4 (Sensitivity goes up by clockwise rotation.)
VR3 : For detection sensitivity adjustment of Master End Sensor-B4 (Sensitivity goes up by clockwise rotation.)
VR4 : For detection sensitivity adjustment of Master Positioning Sensor (Sensitivity goes up by clockwise rotation.)
VR5 : For adjustment of "Free rotation speed" (30 rpm) (The speed goes up by clockwise rotation.)
VR6 : For adjustment of "Master loading speed" (15 rpm) (The speed goes up by clockwise rotation.)
VR7 : For adjustment of "Print speed" (130 rpm) (The speed goes up by clockwise rotation.)
VR8 : For detection sensitivity adjustment of Master Sensor (Sensitivity goes up by clockwise rotation.)

SW

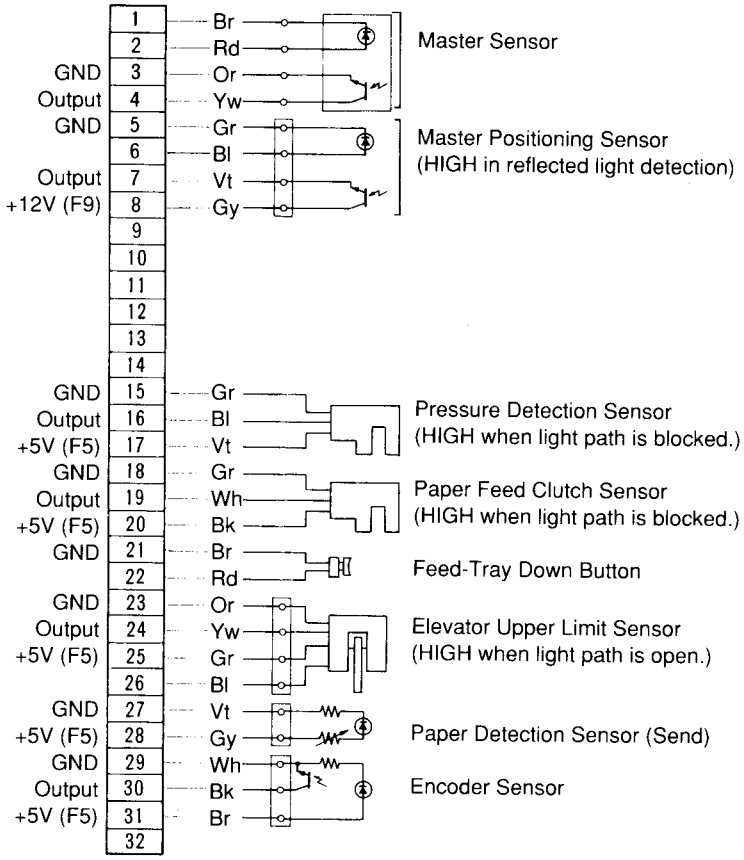
SW1 : For Main Motor rotation (30 rpm)

JP3: For "Key/Card Counter" installation (Opened in installing "Key/Card Counter")

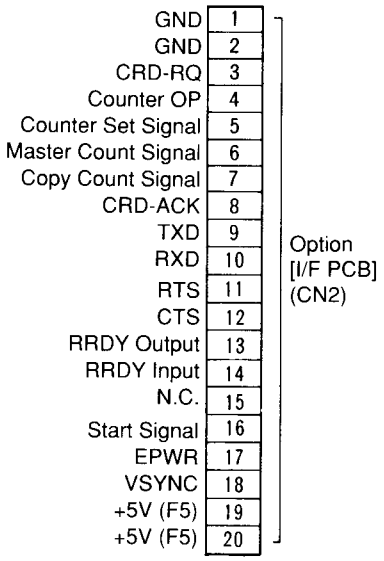

CN1
22 Pins
GND 1
+5V (F5) 2
GND 3
+5V (F5) 4
GND 5
Master Det. 6
End A 7
End B 8
+12V (F9) 9
GND 10
11
GND 12
13
GND 14
15
GND 16
17
18
GND 19
20
GND 21
22
Paper Receiving Sensor 1 (Send)
Paper Receiving Sensor 2 (Send)
Master Det. Sensor (HIGH in detection)
Master End Sensor (A4)
Master End Sensor (B4)
(LOW NOT in reflected light detection)
Master Loading Unit Sw (N/O)
Master Loading Button
Original Feed-Table Set Sw (N/O)
CN3
16 Pins
System Data Signal (TXDAN) 1
System Data Signal (TXDAP) 2
System Control Signal (RSTAN) 3
System Control Signal (RSTAP) 4
GND 5
GND 6
Panel Data Signal (RXDAP) 7
Panel Data Signal (RXDAN) 8
Panel Control Signal (CCTSAP) 9
Panel Control Signal (CCTSAN) 10
GND 11
GND 12
N.C. 13
Reset Signal 14
Reset Signal 15
N.C. 16
Panel Main PCB (CN20) (CN6)


CN2
24 Pins
GND 1
D7 2
D6 3
D5 4
D4 5
D3 6
D2 7
GND 8
D1 9
D0 10
SEL A 11
SEL B 12
MEMO (Write) 13
MEMO (Read) 14
RESET Signal 15
Image Section Signal 16
A0 17
A1 18
A2 19
A3 20
A4 21
A5 22
A6 23
GND 24
Image Processing PCB (CN2)
CN4
26 Pins
GND 1
0° 2
180° 3
+5V (F5) 4
GND 5
6
+5V (F5) 7
GND 8
+5V (F5) 9
GND 10
Output 11
+12V (F9) 12
GND 13
14
15
16
17
18
19
20
21
22
23
24
25
26
Angular Sensors
(LOW in magnetism detection)
Clamp Safety Sw
Master Removal Unit
Master Removal Sensor (Send)
Master Removal Sensor (Receive)
(HIGH when the light path is blocked.)
Disposal Box Set Sw (N/C)
Master Removal Signal A ←
Master Removal Signal B ←
Master Removal Signal C ←
Pressure Control PCB
GND
+5V (F5)
GND
+24V (F6)

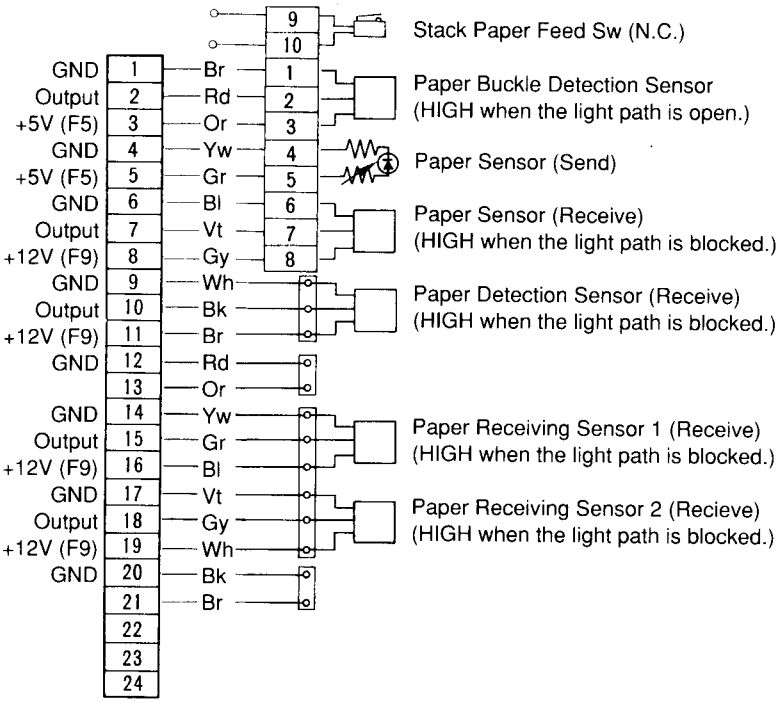
CN5 32 Pins



CN7 20 Pins



CN6 24Pins



CNA 96 Pins

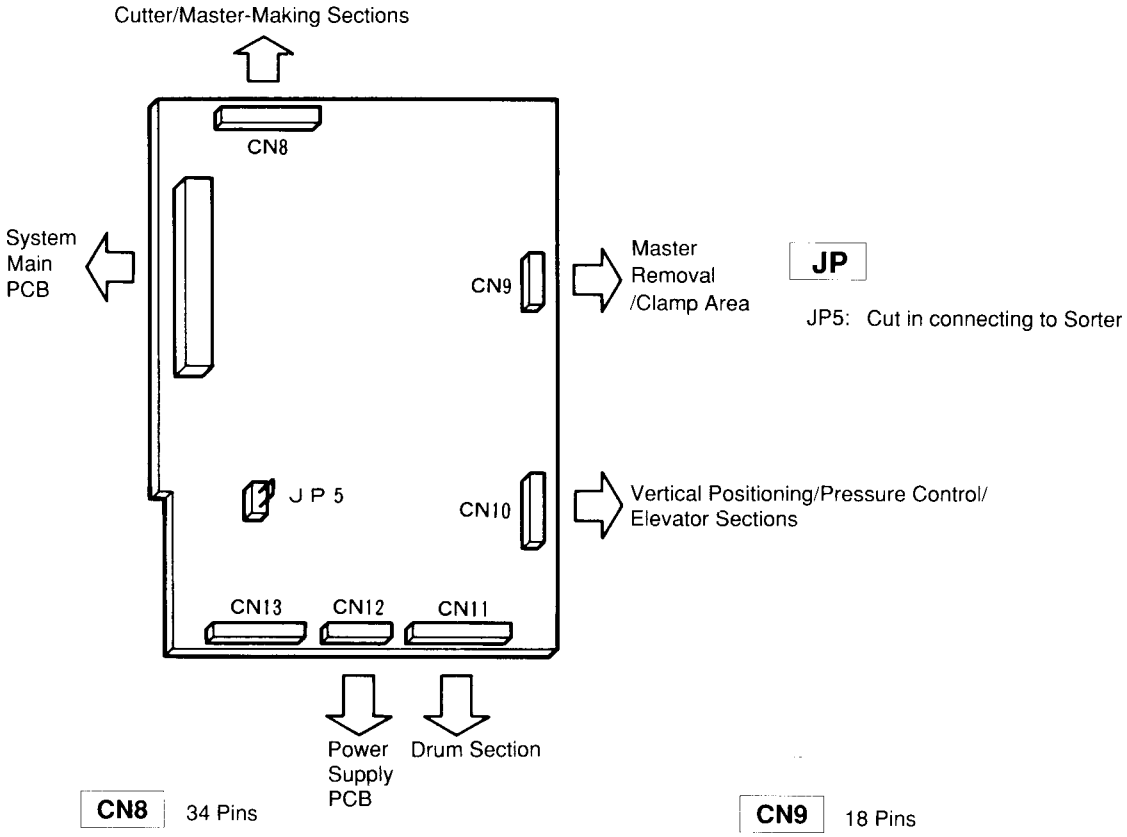
System Drive PCB (CNA)

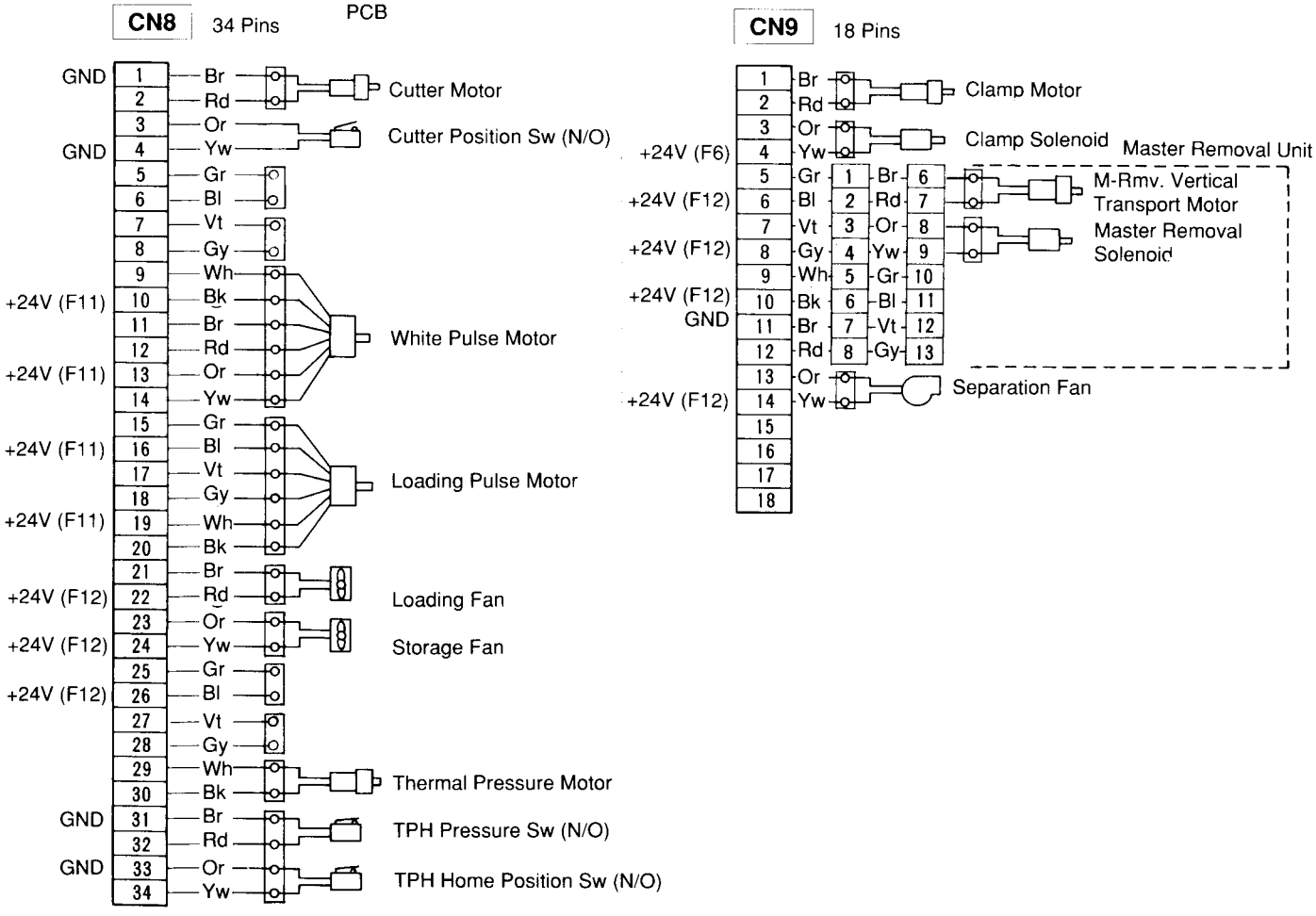
1	GND
2	GND
3	GND
4	GND
5	GND
6	GND
7	+5V (F5)
8	+5V (F5)
9	+5V (F5)
10	Sorter Connect Signal
11	Ink Sensor
12	Overflow Sensor
13	Ink Data Signal
14	Drum Home Position SW
15	Ink Bottle SW
16	Drum Set SW
17	Drum Data Signal
18	Tape End Signal
19	Vertical Centering Sensor
20	
21	
22	
23	Paper Full Stack Signal
24	Sorter Set Signal
25	Print Position Motor Busy
26	Write Pulse Motor CW/CCW
27	Write Pulse Motor (Enable Signal)
28	Loading Pulse Motor (Enable Signal)
29	Separation Fan
30	
31	Inking Motor
32	Lock Solenoid
33	Drum Home Position Lamp
34	Master Count Signal
35	Copy Count signal
36	Storage Fan
37	Thermal Pressure Motor
38	Suction Fan Control
39	Loading Fan
40	Reset
41	Cutter Motor
42	Clamp Motor CW/CCW
43	Clamp Motor ON/OFF
44	Print Position Motor TRIGGER
45	Print Position Motor CW/CCW
46	Print Signal
47	Pressure Solenoid
48	M.-Rmv. Vertical 'Transport Motor
49	
50	Elevator Lower Limit SW

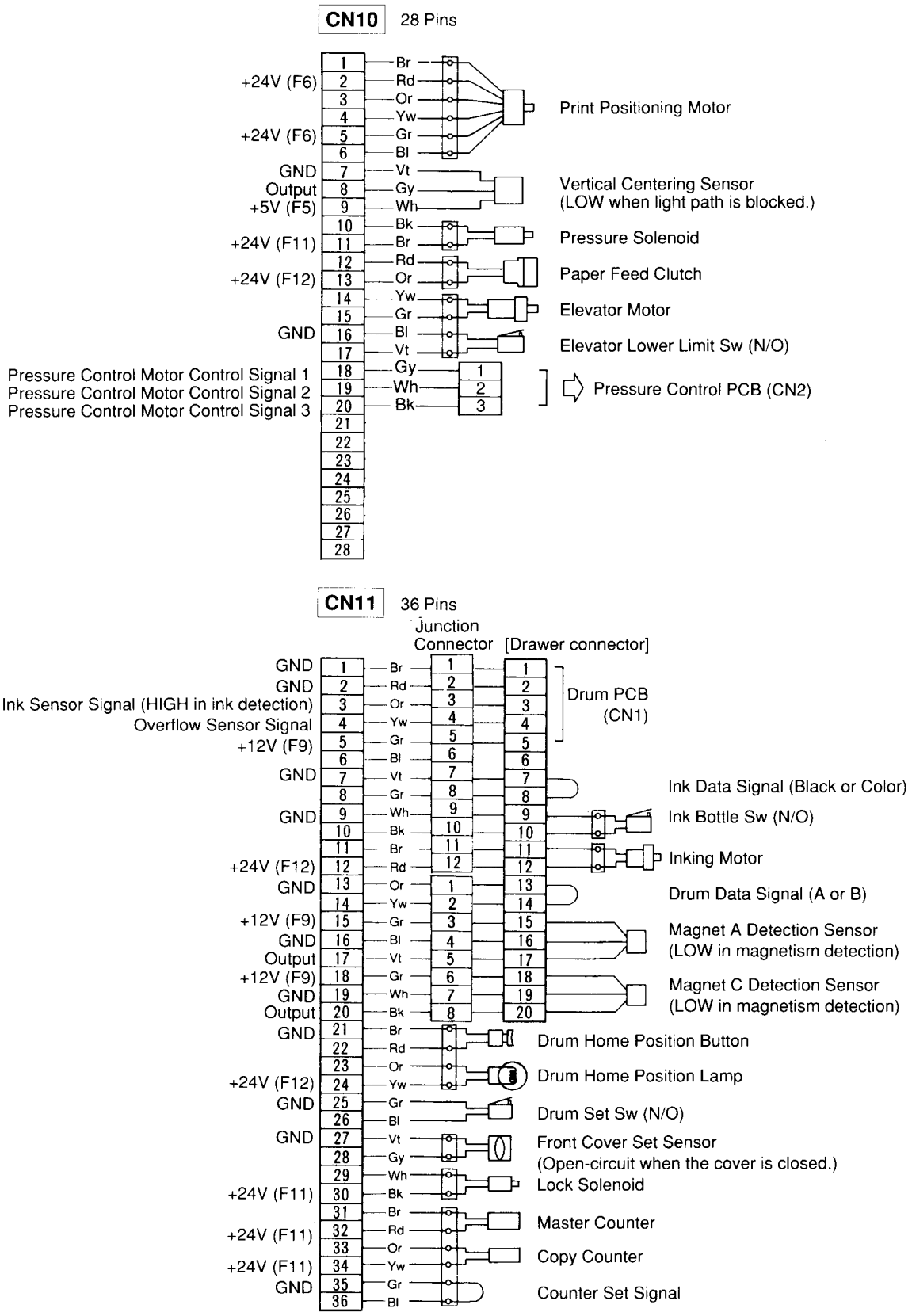
System Drive PCB (CNA)

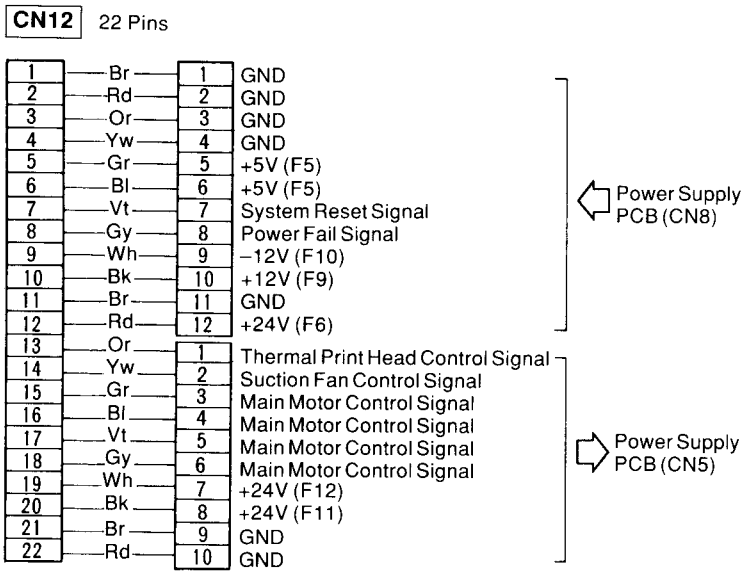
51	Elevator Motor UP/DOWN
52	Elevator Motor ON/OFF
53	Clamp Solenoid
54	Pressure Control Motor CTL 3
55	N.C.
56	Master-make Start/Stop Signal
57	Print Start/Stop Signal
58	Pressure Control Motor CTL 2
59	Pressure Control Motor CTL 1
60	Cluster Signal A
61	Cluster Signal B
62	Status 1
63	Status 2
64	Magnet A Det. Sensor
65	Paper Sensor
66	Paper Receiving Sensor 2
67	Counter Set Signal
68	TXDB
69	Main Motor Pulse K
70	Magnet C Det. Sensor
71	RXDB
72	Main Motor Pulse A
73	Magnet A Det. Sensor
74	RTSB
75	Main Motor Brake A
76	Power Fail
77	CTSB
78	Main Motor Brake K
79	Clock
80	Write Pulse Motor Clock
81	Front Cover Set Signal
82	P.-F. Clutch/Paper Buckle Det. Sensor
83	N.C.
84	N.C.
85	+12V (F9)
86	+12V (F9)
87	+12V (F9)
88	−12V (F10)
89	−12V (F10)
90	−12V (F10)
91	+24V (F6)
92	+24V (F6)
93	+24V (F6)
94	GND
95	GND
96	GND

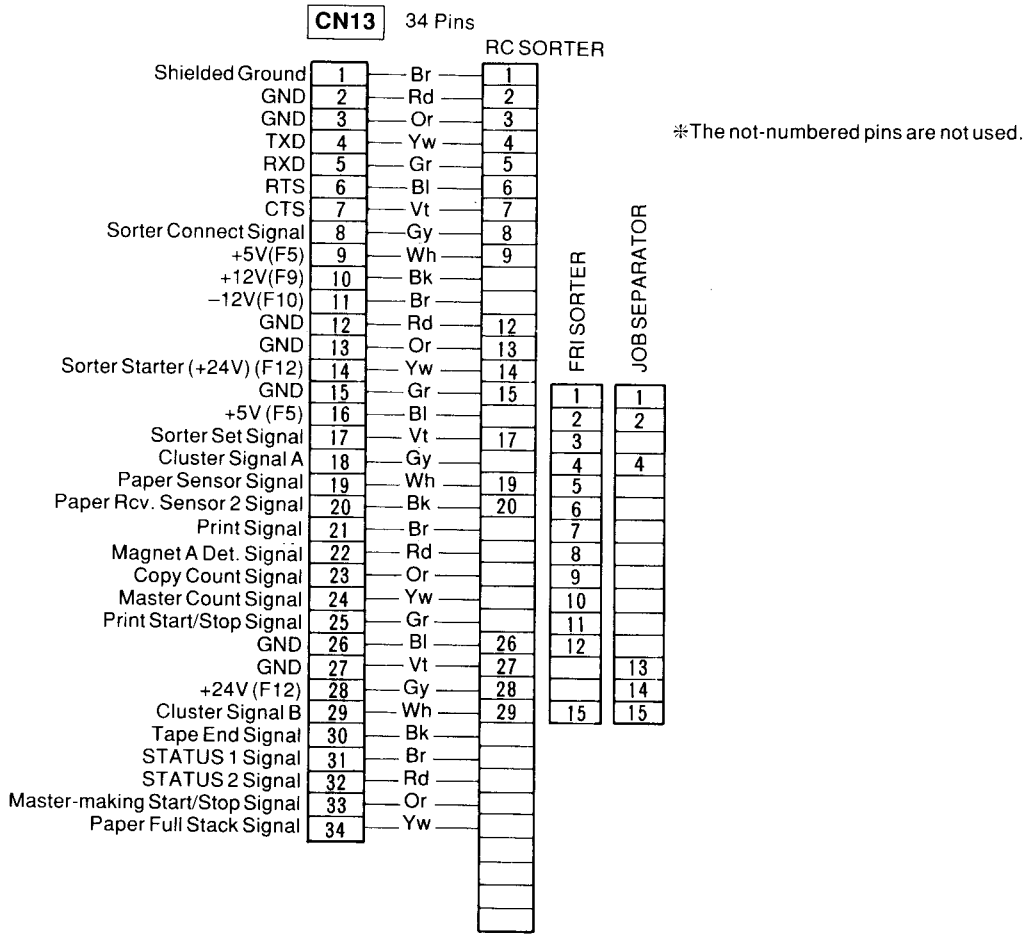
4. SYSTEM DRIVE PCB





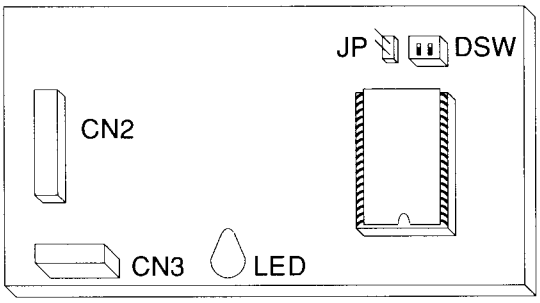

CN10
28 Pins
+24V (F6)
+24V (F6)
GND
Output
+5V (F5)
+24V (F11)
+24V (F12)
GND
Pressure Control Motor Control Signal 1
Pressure Control Motor Control Signal 2
Pressure Control Motor Control Signal 3
Br
Rd
Or
Yw
Gr
Bl
Vt
Gy
Wh
Bk
Print Positioning Motor
Vertical Centering Sensor
(LOW when light path is blocked.)
Pressure Solenoid
Paper Feed Clutch
Elevator Motor
Elevator Lower Limit Sw (N/O)
Pressure Control PCB (CN2)
CN11
36 Pins
Junction Connector
[Drawer connector]
GND
GND
Ink Sensor Signal (HIGH in ink detection)
Overflow Sensor Signal
+12V (F9)
GND
GND
+24V (F12)
GND
+12V (F9)
GND
Output
+12V (F9)
GND
Output
GND
+24V (F12)
GND
GND
+24V (F11)
+24V (F11)
+24V (F11)
GND
Drum PCB (CN1)
Ink Data Signal (Black or Color)
Ink Bottle Sw (N/O)
Inking Motor
Drum Data Signal (A or B)
Magnet A Detection Sensor
(LOW in magnetism detection)
Magnet C Detection Sensor
(LOW in magnetism detection)
Drum Home Position Button
Drum Home Position Lamp
Drum Set Sw (N/O)
Front Cover Set Sensor
(Open-circuit when the cover is closed.)
Lock Solenoid
Master Counter
Copy Counter
Counter Set Signal


CN12
22 Pins
1 Br 1 GND
2 Rd 2 GND
3 Or 3 GND
4 Yw 4 GND
5 Gr 5 +5V (F5)
6 Bl 6 +5V (F5)
7 Vt 7 System Reset Signal
8 Gy 8 Power Fail Signal
9 Wh 9 −12V (F10)
10 Bk 10 +12V (F9)
11 Br 11 GND
12 Rd 12 +24V (F6)
Power Supply PCB (CN8)
13 Or 1 Thermal Print Head Control Signal
14 Yw 2 Suction Fan Control Signal
15 Gr 3 Main Motor Control Signal
16 Bl 4 Main Motor Control Signal
17 Vt 5 Main Motor Control Signal
18 Gy 6 Main Motor Control Signal
19 Wh 7 +24V (F12)
20 Bk 8 +24V (F11)
21 Br 9 GND
22 Rd 10 GND
Power Supply PCB (CN5)



*The not-numbered pins are not used.

5. PRESSURE CONTROL PCB



DIP SW

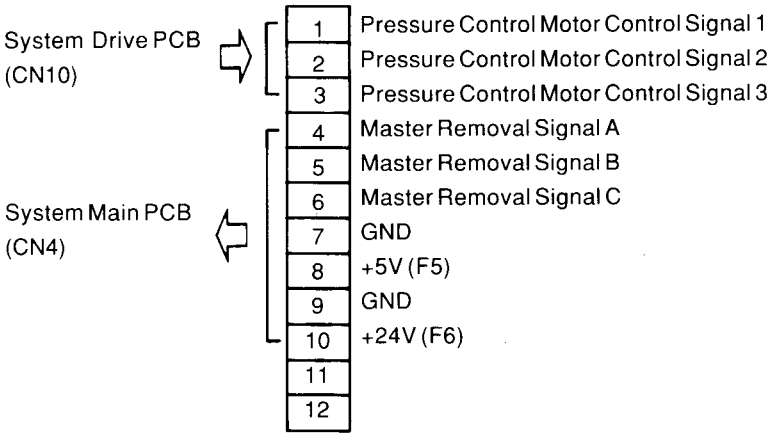
Type of Drum	SW1	SW2
A4 Drum	OFF	OFF
Legal Drum	OFF	OFF
B4 Drum	OFF	ON

VR1 : For luminosity adjustment of LCD panel

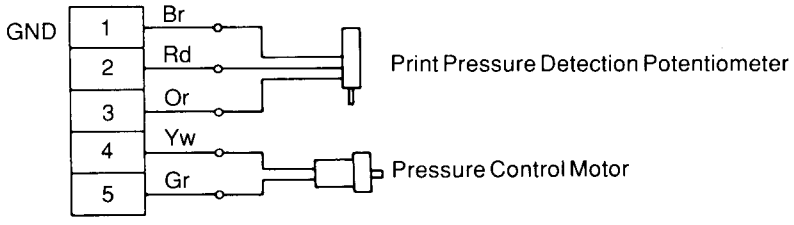
LED

LED is ON when the print pressure is set at the standard value.
(When step 3 is selected in the density mode.)

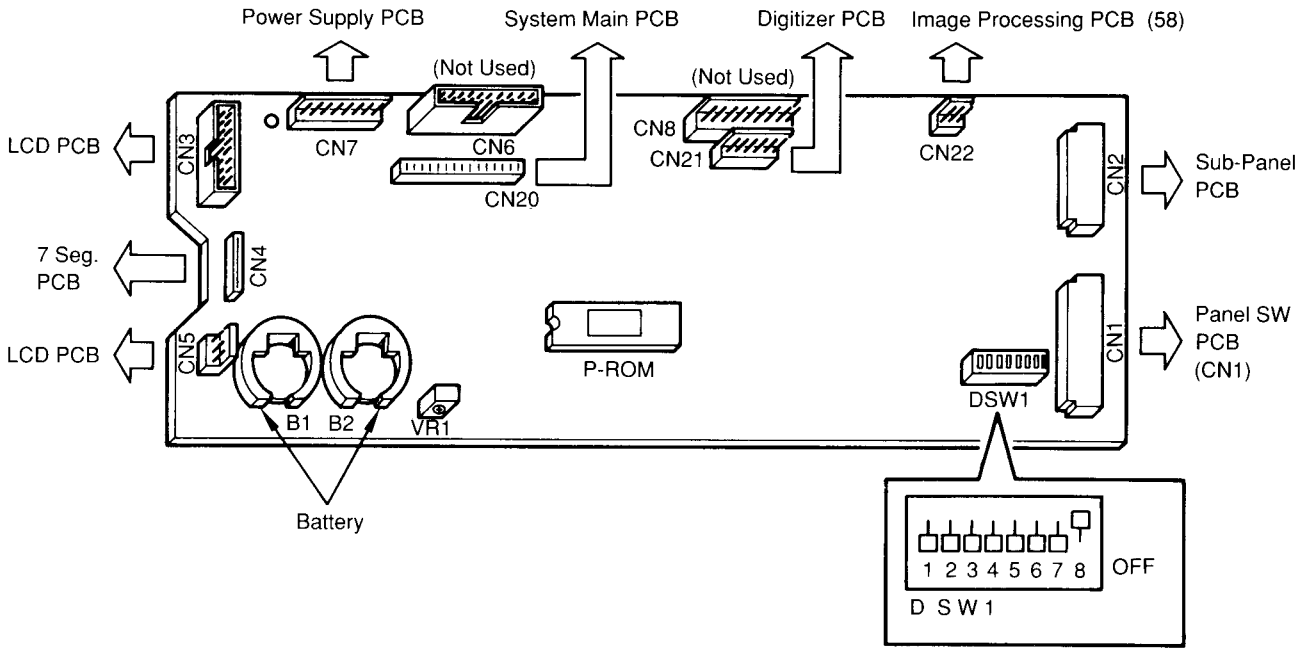
CN2 12 Pins



CN3 5 Pins



6. PANEL MAIN PCB



VR

VR1 : For luminosity adjustment of LCD panel

SW

SW	FUNCTION	OFF	[ON]
DSw1-1	The initial print speed selection ※1	100RPM	60RPM
DSw1-2	The initial paper size selection	A4 or B4 or Legal ※2	Setting before Power OFF or Reset
DSw1-3	The initial ACC setting selection	ACC ON	ACC OFF
DSw1-4	Priority selection between Density- and Speed-Change modes	Density-Change mode	Speed-Change mode
DSw1-5	※3		
DSw1-6			
DSw1-7			
DSw1-8			

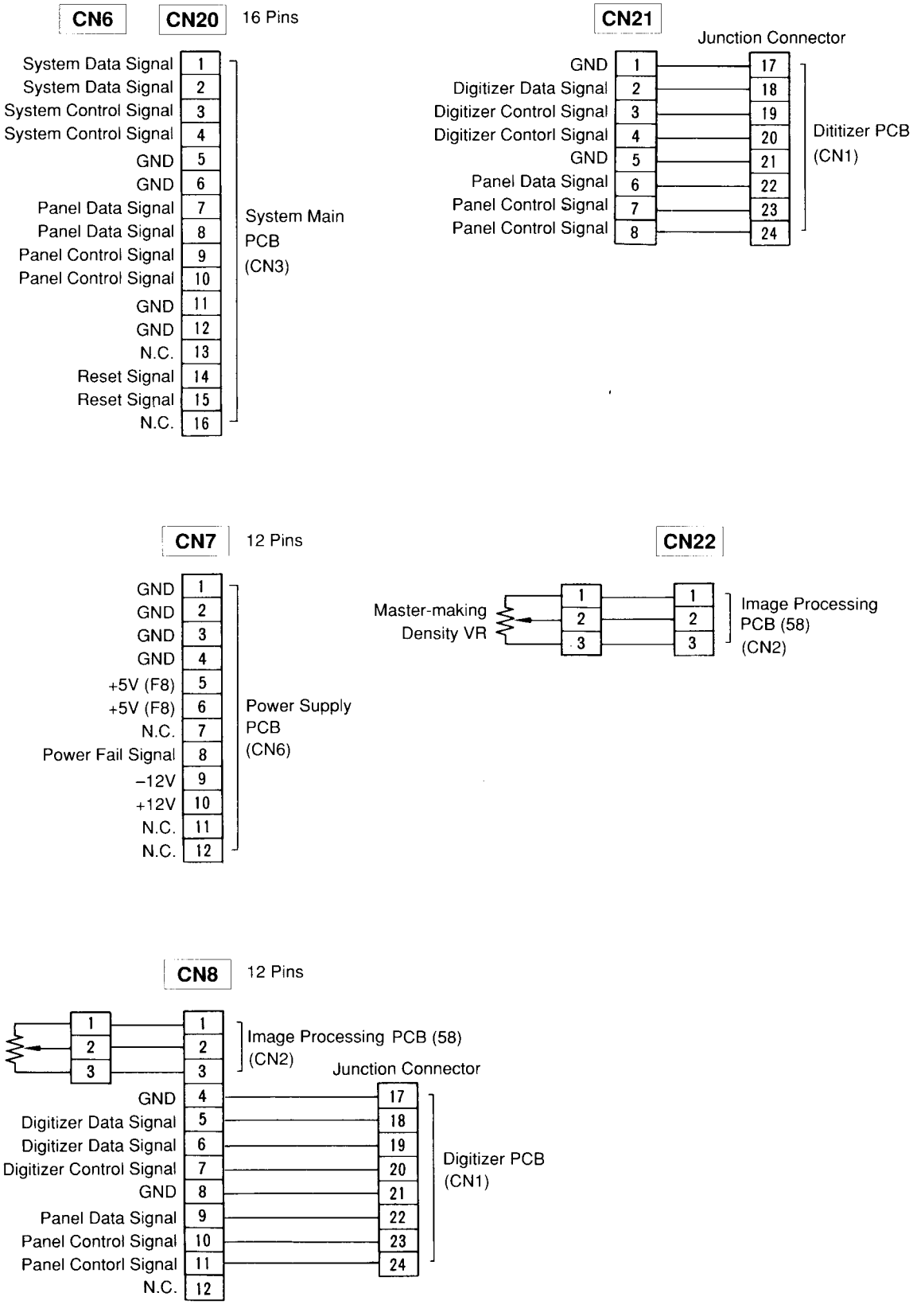
※1 Functions only in Speed-Change mode.
In Density-Chage mode, the print speed is fixed at 100 rpm.

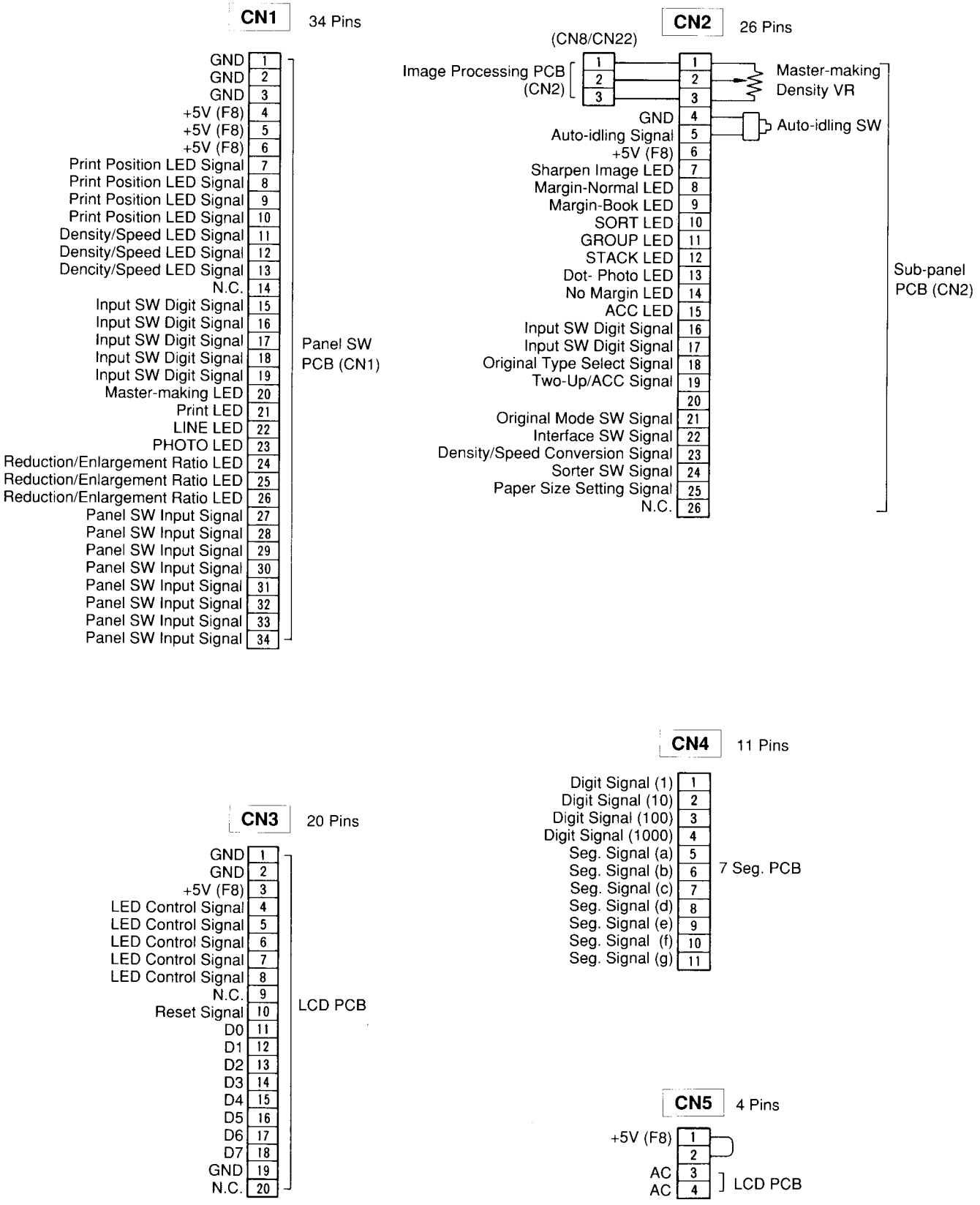
※2

A4	Picture Panel
B4	Metric Panel
Legal	Inch Panel

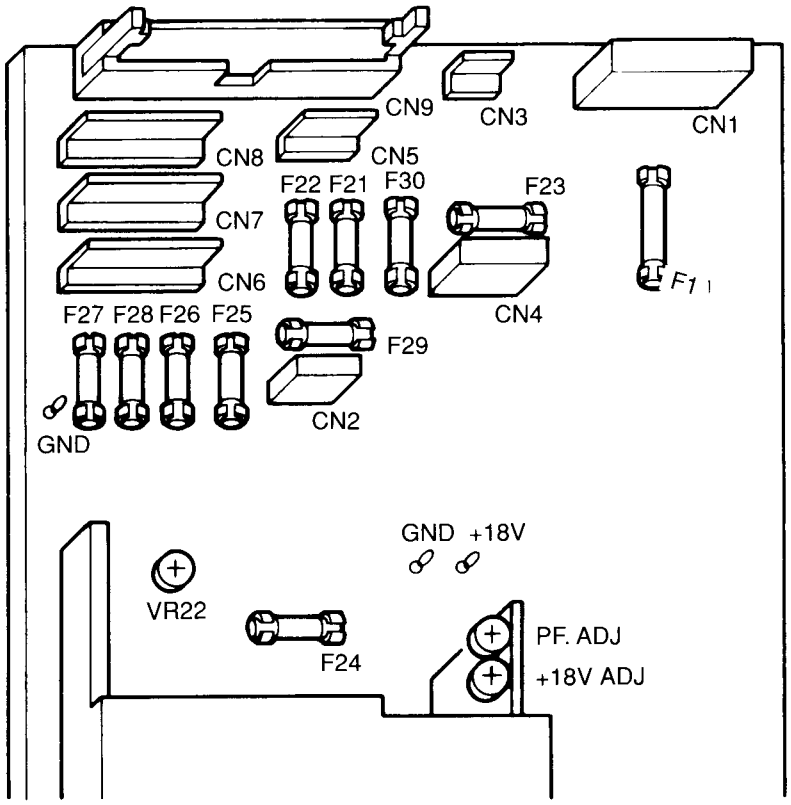
※3

	U.S.A.	A4 Drum Type	B4 Drum Type
DSw1-5	OFF	ON	OFF
DSw1-6	OFF	OFF	ON
DSw1-7	OFF	OFF	OFF
DSw1-8	OFF	OFF	OFF


CN6
CN20
16 Pins
System Data Signal 1
System Data Signal 2
System Control Signal 3
System Control Signal 4
GND 5
GND 6
Panel Data Signal 7
Panel Data Signal 8
Panel Control Signal 9
Panel Control Signal 10
GND 11
GND 12
N.C. 13
Reset Signal 14
Reset Signal 15
N.C. 16
System Main PCB (CN3)
CN21
Junction Connector
GND 1 17
Digitizer Data Signal 2 18
Digitizer Control Signal 3 19
Digitizer Contorl Signal 4 20
GND 5 21
Panel Data Signal 6 22
Panel Control Signal 7 23
Panel Control Signal 8 24
Dititizer PCB (CN1)
CN7
12 Pins
GND 1
GND 2
GND 3
GND 4
+5V (F8) 5
+5V (F8) 6
N.C. 7
Power Fail Signal 8
–12V 9
+12V 10
N.C. 11
N.C. 12
Power Supply PCB (CN6)
CN22
Master-making Density VR
1 2 3
1 2 3
Image Processing PCB (58) (CN2)
CN8
12 Pins
Master-making Density VR
1 2 3
1 2 3
Image Processing PCB (58) (CN2)
Junction Connector
GND 4 17
Digitizer Data Signal 5 18
Digitizer Data Signal 6 19
Digitizer Control Signal 7 20
GND 8 21
Panel Data Signal 9 22
Panel Control Signal 10 23
Panel Contorl Signal 11 24
N.C. 12
Digitizer PCB (CN1)


CN1
34 Pins
GND 1
GND 2
GND 3
+5V (F8) 4
+5V (F8) 5
+5V (F8) 6
Print Position LED Signal 7
Print Position LED Signal 8
Print Position LED Signal 9
Print Position LED Signal 10
Density/Speed LED Signal 11
Density/Speed LED Signal 12
Dencity/Speed LED Signal 13
N.C. 14
Input SW Digit Signal 15
Input SW Digit Signal 16
Input SW Digit Signal 17
Input SW Digit Signal 18
Input SW Digit Signal 19
Master-making LED 20
Print LED 21
LINE LED 22
PHOTO LED 23
Reduction/Enlargement Ratio LED 24
Reduction/Enlargement Ratio LED 25
Reduction/Enlargement Ratio LED 26
Panel SW Input Signal 27
Panel SW Input Signal 28
Panel SW Input Signal 29
Panel SW Input Signal 30
Panel SW Input Signal 31
Panel SW Input Signal 32
Panel SW Input Signal 33
Panel SW Input Signal 34
Panel SW PCB (CN1)
CN2
26 Pins
(CN8/CN22)
Image Processing PCB (CN2)
1
2
3
Master-making Density VR
GND 4
Auto-idling Signal 5
Auto-idling SW
+5V (F8) 6
Sharpen Image LED 7
Margin-Normal LED 8
Margin-Book LED 9
SORT LED 10
GROUP LED 11
STACK LED 12
Dot- Photo LED 13
No Margin LED 14
ACC LED 15
Input SW Digit Signal 16
Input SW Digit Signal 17
Original Type Select Signal 18
Two-Up/ACC Signal 19
20
Original Mode SW Signal 21
Interface SW Signal 22
Density/Speed Conversion Signal 23
Sorter SW Signal 24
Paper Size Setting Signal 25
N.C. 26
Sub-panel PCB (CN2)
CN3
20 Pins
GND 1
GND 2
+5V (F8) 3
LED Control Signal 4
LED Control Signal 5
LED Control Signal 6
LED Control Signal 7
LED Control Signal 8
N.C. 9
Reset Signal 10
D0 11
D1 12
D2 13
D3 14
D4 15
D5 16
D6 17
D7 18
GND 19
N.C. 20
LCD PCB
CN4
11 Pins
Digit Signal (1) 1
Digit Signal (10) 2
Digit Signal (100) 3
Digit Signal (1000) 4
Seg. Signal (a) 5
Seg. Signal (b) 6
Seg. Signal (c) 7
Seg. Signal (d) 8
Seg. Signal (e) 9
Seg. Signal (f) 10
Seg. Signal (g) 11
7 Seg. PCB
CN5
4 Pins
+5V (F8) 1
2
AC 3
AC 4
LCD PCB

7. POWER SUPPLY PCB

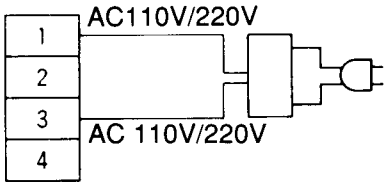


CN	CN1	From Main Power Sw
	CN2	To Main Motor
	CN3	To Suction Fan
	CN4	To Thermal Print Head
	CN5	From System Drive PCB
	CN6	Not Used
	CN7	To Panel Main PCB
	CN8	To System Drive PCB
	CN9	To Image Processing PCB (58)
TP	GND	Ground
	+18V	For check of +18V output
VR	VR22	For adjustment of +5V output
	PFADJ	Used only for adjustment in factory
	+18VADJ	For adjustment of +18V output (TPH Input Voltage)

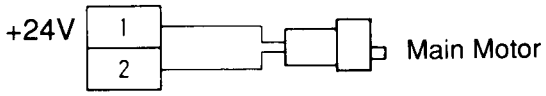
FUSE

No.	Rate	Protected line	Symptoms in case of open-circuited fuse	Relevant components
F1	10A (110V) 5A (220V)	Main Power	No Power	Main Power Sw
F21	3.15A	DC24V	No problem in printing. Master mis-feed in master-making or confidential operation.	Loading pulse motor, Loading fan, Storage fan, Thermal pressure motor, Cutter motor, Write pulse motor
F22	3.15A	DC24V	[T2: Call Service], Paper feed jam, Master removal error	M.-Rmv. vertical transport motor, Master removal solenoid, Separation fan, Pressure solenoid, Paper feed clutch, Elevator motor, Lock solenoid, Inking motor, Counters, Drum home position lamp
F23	1A	DC24 – 18V	Paper receiving jam	Suction fan
F24	8A	DC24V	[T1: Call Service]	Main Motor
F25	3.15A	DC+12V	[T4: Call Service]	Various sensors
F26	3.15A	DC–12V	No LCD indication	
F27	5A	DC5V	No Background light in LCD panel & No Print quantity indication	
F28	5A	DC5V	No power except for Suction fan	
F29	3.15A	DC24V		For optional equipments
F30	3.15A	DC24V	[T5: Call Service]	Clamp motor, Clamp solenoid, Print positioning motor, Pressure control motor, Read pulse motor, ADF Transfer motor

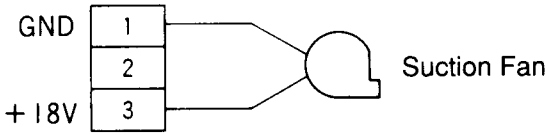
CN1 4 pins



CN2 2 pins

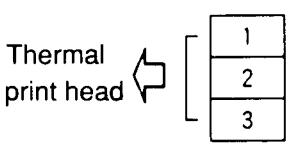


CN3 3 pins

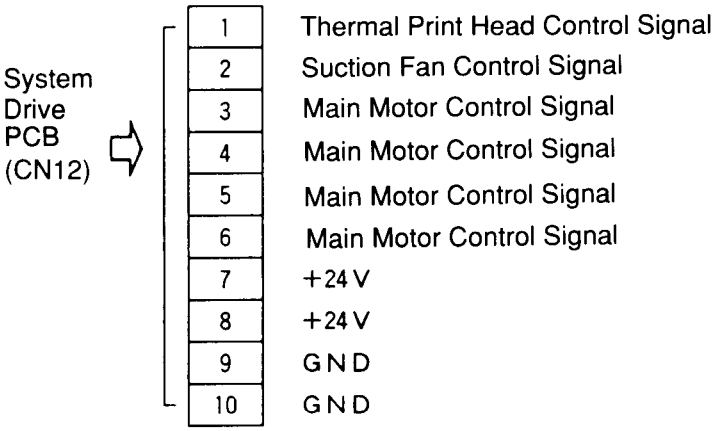


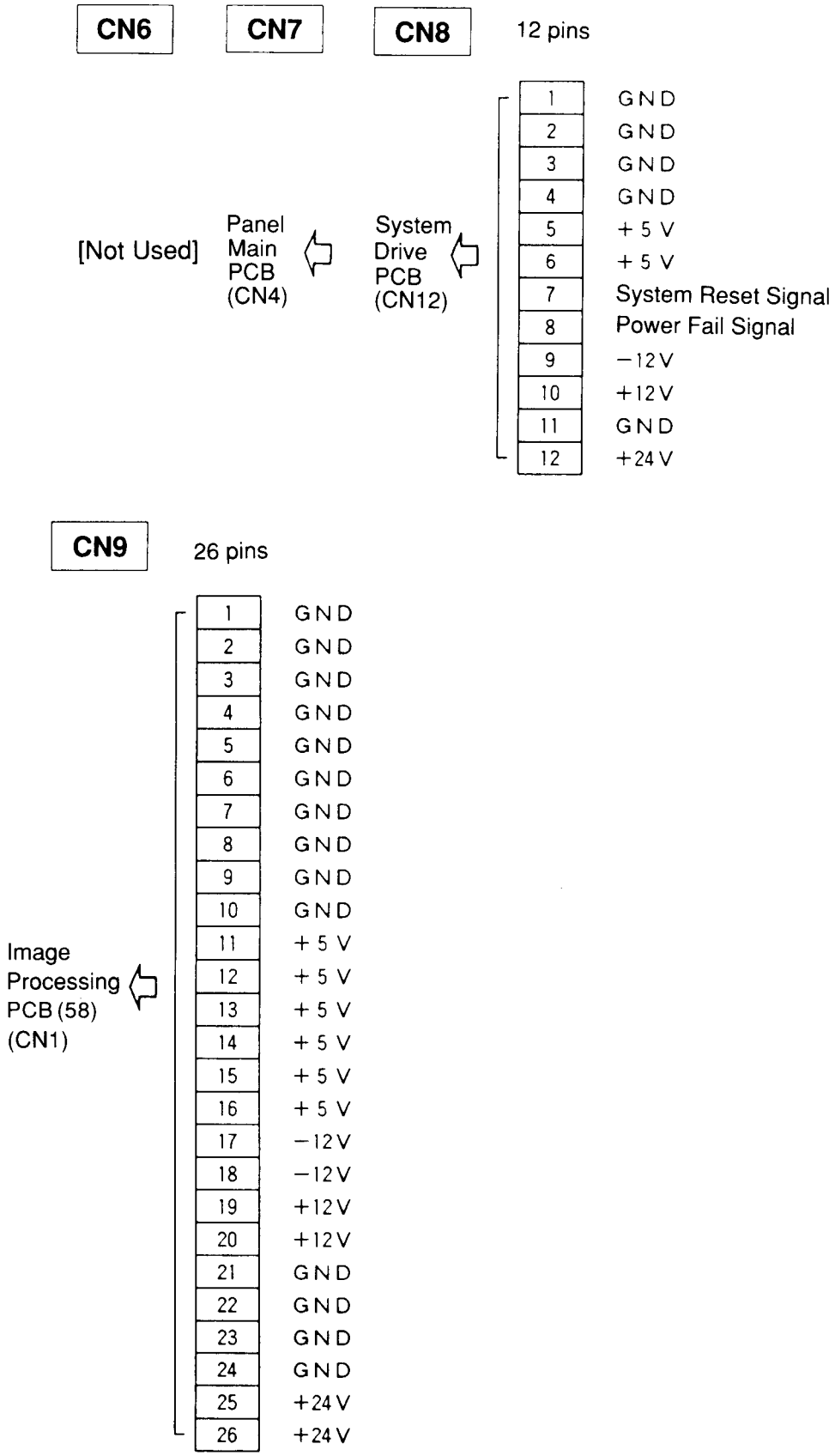
(+24V in high-speed rotation)

CN4 3 pins



CN5 10 pins




CN6
CN7
CN8
12 pins
[Not Used]
Panel Main PCB (CN4)
System Drive PCB (CN12)
1 GND
2 GND
3 GND
4 GND
5 +5 V
6 +5 V
7 System Reset Signal
8 Power Fail Signal
9 −12 V
10 +12 V
11 GND
12 +24 V
CN9
26 pins
Image Processing PCB (58) (CN1)
1 GND
2 GND
3 GND
4 GND
5 GND
6 GND
7 GND
8 GND
9 GND
10 GND
11 +5 V
12 +5 V
13 +5 V
14 +5 V
15 +5 V
16 +5 V
17 −12 V
18 −12 V
19 +12 V
20 +12 V
21 GND
22 GND
23 GND
24 GND
25 +24 V
26 +24 V